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BULLETIN OF UNDERGRADUATE STUDIES

1976-1978

COLLEGE OF HEALTH PROFESSIONS

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Prospective applicants for admission will find it helpful to first refer to sections of the *Admissions Regulations and General Academic Rules* regarding policies of the University and then refer to this bulletin for details concerning specific curricula and course offerings.

The rules and regulations published in this bulletin were in effect at the beginning of the 1976-1977 academic year and are subject to change through established procedures of the College of Health Professions. Changes in academic rules and regulations are effective at the beginning of the academic year following their adoption. Listings of course offerings are subject to change by concerned departments and University administrators in the event that unforseen faculty changes have taken place or insufficient numbers of students have subscribed to course offerings. The official schedule of course offerings for each semester is provided in the *Schedule of Classes,* which is published biannually by the Office of the Registrar.

The University of Lowell is an Equal-Opportunity, Affirmative-Action University and does not discriminate in admissions or employment on the basis of sex in compliance with Title IX. Any inquiries concerning Title IX should be directed to the Title IX Coordinator or the Director of the Office of Civil Rights.

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COLLEGE OF HEALTH PROFESSIONS

University of Lowell
Lowell, Massachusetts 01854

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COLLEGE OF HEALTH PROFESSIONS

ACADEMIC POLICIES

UNDERGRADUATE EDUCATION IN THE HEALTH PROFESSIONS

The College of Health Professions seeks to provide programs in the health professions which will promote an appreciation for the wide range of health-care needs and an understanding of specific health-care roles. Accordingly, these programs are designed to prepare students to contribute to the solution of the serious inadequacies of our health-care system as a whole as well as to provide specific health care services, and they stress both the development of health-care skills and the acquisition of the theoretical and factual knowledge which are fundamental to continued professional growth. The diversification of programs offered by the College and the common experience provided by the core curriculum promote a continuity of faculty effort and a diversification of student point of view which is a recognized goal for current education in the health professions. The undergraduate curricula of the College are administered under policies which are consistent with those of the University for professional Bachelor of Science degree programs.

OBJECTIVES OF THE COLLEGE OF HEALTH PROFESSIONS

The College of Health Professions seeks to achieve the following objectives:

1. To prepare professionals in health fields at the baccalaureate and graduate levels;
2. To offer specialized curricula which are solidly based upon the liberal arts and sciences;
3. To discern trends in the delivery of health care for the purpose of forecasting health-care manpower needs;
4. To analyze the dynamics of health-care delivery for the purpose of improving the quality of health services;
5. To provide learning experiences through a core curriculum which encourage all students in the several programs of the College to interact with one another and to share knowledge pertinent to the health professions;
6. To provide a flexible curriculum which provides opportunities for students to reevaluate career choices;
7. To provide an educational base for graduate study; and
8. To provide an educational environment which promotes responsibility for continued professional and personal growth.

BACCALAUREATE DEGREE PROGRAMS

The College of Health Professions offers undergraduate programs leading to the Bachelor of Science degree in health education, health services administration, medical technology, and nursing. For information concerning the degree of Master of Science in Gerontological Nursing, see the *Graduate School Catalogue.* The requirements for majors are set by University departments but must specify a minimum of 30 semester credits. At least 15 credits in the major field must be taken at the upper-division course level. All Bachelor of Science degree programs require a minimum of 50 semester credits outside the major field.

All health professsion students share a common curriculum for the first three semesters which provides a solid foundation in the sciences, the psycho-social areas, and the humanities. This core experience affords students with ample opportunities to review their choices of professional majors without undue loss of time or credit. All curricula in the health professions also have a clinical or teaching component in one or more community health agencies or schools.

In order to qualify for the Bachelor of Science degree in the College of Health Professions, each student must comply with the University Core Requirements and with the rules and regulations of the College of Health Professions which govern baccalaureate programs. The University Core Requirements are described in a separate publication, *Admission Regulations and General Academic Rules,* to which students should refer for general academic policies of the University. The academic policies of the College of Health Professions are enumerated below and in the following sections concerning particular health-profession programs.

GENERAL COLLEGE REQUIREMENTS

Admission Requirements of the College of Health Professions

High school applicants for all undergraduate programs in the College of Health Professions must achieve a minimum grade-point average of 2.50 in high school courses and minimum verbal and mathematics scores of 450 in Scholastic Aptitude Tests of the College Entrance Examination Board. All applicants are also strongly advised to present biology and chemistry as part of their secondary school course work.

The requirements for the first two years of health education, health services administration, medical technology, and nursing programs may be completed at the University of Lowell or at another accredited college or university. Students enrolled in Community Colleges of the Commonwealth who wish to transfer to the junior year programs are advised to declare their intentions to the chairperson of their intended major at the University prior to the beginning of the second semester of the sophomore year in order to be considered for one of the limited number of clinical positions. Admission of transfer students to the professional, upper-division program is competitive and requires, as a minimum, the completion of all prerequisite core courses and the achievement of a cumulative grade-point average of 2.50 on a 4 point scale. Medical Technology applicants are also required to maintain a "C" in each of the clinical laboratory science courses.

Retention and Continuance in Programs of the College of Health Professions

1. Students seeking junior status and admission to upper-division courses of the College must satisfactorily complete sixty semester credits consisting of the core curriculum, as outlined, and the specified course work in the major for the second semester of the sophomore

year. This requirement must be satisfied irrespective of the classification policies of the University.

2. Students must achieve a minimum grade point average of 2.50 in the sixty semester credits taken at the University (or in other accredited colleges and universities) by the end of the second semester of the sophomore year in order to secure admission to upper-division courses of the junior year. Medical technology students are also required to achieve a grade of "C" or better in each of the clinical laboratory science courses.
3. Students who have satisfied the first requirement for retention and have achieved a grade-point average between 2.30 and 2.49 may be admitted to the junior year on "conditional status." All students who are granted such status must achieve a grade-point average of 2.50 by the end of the first semester of the junior year. Such students who seek admission to the upper-division medical technology program are granted "conditional status" only upon the recommendation of the Admissions Committee of the Department of Clinical Laboratory Sciences, who will evaluate requests of eligible students on the basis of evidence of academic improvement, recommendations of advisors and instructors, evidence of motivation for a career in medical technology, and evaluation of personal interview.
4. Students who fail to achieve during any semester of the junior or senior year a cumulative grade-point average of 2.50 for their total attempted course work and for their professional courses in their selected major will be placed on warning and notified that they must achieve the required 2.50 average by the end of the following semester or they will be dropped from their major program.
5. All students in the College of Health Professions must demonstrate a state of emotional and physical health which will enable them to provide safe, competent practice in their chosen professional field. In special cases, at the request of the Professional Review Committee of the student's major department, an individual may be required to present statements of physical and/or mental health from appropriate physicians or psychiatrists who are fully licensed by the Commonwealth of Massachusetts. On the basis of a review of such statements, the Professional Review Committee may recommend to the chairperson of the student's major department that the individual be denied admission to the major program or that his or her enrollment in this program be terminated.

Additional regulations of the Teacher-Education Committee of the University apply to the health education major. These policies are listed under the heading for health education.

Appeals Procedures

Any student who has been admitted to the junior year with "conditional status" and who has not attained a cumulative grade-point average of 2.50 in professional courses and in other course work by the end the junior year, or any student who has been dropped from the major for non-academic reasons concerning emotional and/or physical health, may submit a written petition to the Professional Review Committee for reevaluation of his or her record for the purpose of reinstatement. This petition must be received no later than one year after dismissal from the major and may be submitted only once. All decisions of the Professional Review Committee in evaluating such petitions are final. In making a recommendation for reinstatement, the Professional Review Committee may lay down the requirements which the student must satisfy as a condition of his or her reinstatement.

Class Attendance Policy

The College of Health Professions values regularity of attendance in classroom and laboratory sessions as a means of achieving collegiate success. Each instructor is required to state his or her attendance regulations in writing at the beginning of each course. Students who have exceeded the number of permitted absences may be failed by the instructor unless they have withdrawn from the course or the University before the established calendar deadline.

Declaration of Major

Students entering the College of Health Professions are advised to declare their major fields at the time of freshman admission. Although students who are interested in areas of the health professions but are unsure of their choices of specific majors may be admitted to the College as "undeclared students", subsequent selection of majors by such "undeclared students" may be limited to health education and health services administration if there has been no attrition among those students who have declared nursing and medical technology majors as freshmen. All students are required to make a declaration of major by the end of the sophomore year, and consequently no student may retain the status of "undeclared student" later than the semester in which he or she has earned 60 credits. Whenever a student makes a declaration of major he or she is required to file an official notification with the Office of the Registrar.

Change of Major

Once students have made a declaration of major field, they may not change their degree program without specific authorization from the chairperson of the new major to be declared and, in the event of an intercollegiate transfer, from the dean of the college to which they transfer. Additional course work beyond the minimum degree requirements and extension of the normal four-year period of study may be expected for students who change their majors later than the first semester of their junior year. The intercollegiate transfer policy of the University should be consulted by those who have begun their studies in the University in a college other than the College of Health Professions or who wish to transfer from the College of Health Professions to another college of the University. All changes of major require the filing of an official notification with the Office of the Registrar.

Academic Advisement

An academic advisor will be assigned to all incoming freshmen and transfer students. Prior to each registration period, students should meet with their advisors to discuss their selection of academic programs. Students who fail to avail themselves of this opportunity and who register for incorrect courses may find it necessary to extend their period of academic study. All seniors should consult with their advisors prior to the established University deadline for filing programs of study with the Office of the Dean, College of Health Professions. The program of study summarizes a senior's status with respect to requirements for courses and grade-point averages and insures that all stated graduation requirements have been satisfied prior to the formal approval of degree candidates by the Faculty.

Transfer Policies

Course credits for transferred work are evaluated by the Office of Admissions at the time of student transfer and in accordance with general policies of the University. Since the nature of professional programs precludes the application of non-equivalent transfer courses to specific curriculum requirements, the records of transfer students are also evaluated by major departments at the time a student is accepted for matriculation by the College of Health Professions. All transferred courses which have been accepted by the University are listed on the student's permanent record card, and those courses which are not applicable to specific curriculum requirements are credited, whenever possible, as ''unrestricted elective courses.''

Since some curricula do not provide for such ''unrestricted elective courses,'' or the number of transferred courses may exceed the number of ''unrestricted elective courses'' which are permitted within the specifications for minimum degree requirements, transferred courses which are not applicable to the specific requirements of a curriculum are not counted in the determination of the number of ''course hours completed'' until the semester of graduation. (Cf. ''Academic Standing,'' *Admission Regulations and General Academic Rules,* for an explanation of ''course hours completed.'') This procedure prevents the early imposition of a grade point requirement for retention which is in excess of that specified for the number of credits completed and applicable to the student's particular curriculum. For instance, a student who transfers 60 credits is required to achieve a grade-point average of 1.80 for the first 15 credits attempted at the University. In the event that 30 of these credits are not applicable to his or her professional or academic curriculum, he or she will be charged with the completion of 30 course credits and will be required to achieve a grade-point average of 1.60 for the first 15 credits attempted at the University.

The applicability of grades received in transferred courses for the determination of the grade-point average of the student's major at the University of Lowell is determined by policies of each of the colleges. The policy of the College of Health Professions is to count such grades for the purpose of determining the student's major grade-point average.

Repetition of Transfer Courses at the University

A student who has been granted transfer credit, and on this basis has been assigned to advanced courses for which the transferred course is a prerequisite, may be advised to repeat such transferred work at the University, or to take a more elementary course than that which has been transferred, when the competence of the student has been demonstrably inadequate. Permission to repeat a transferred course is granted by filing an academic petition form through the office of the College dean. Since credit may not be granted more than once for the completion of any course, a condition for filing such a petition is the simultaneous filing of a request to revoke recognition of the previously transferred course.

Intercollegiate Transfer within the University

Procedures for making an intercollegiate transfer within the University are described under the heading "Change of Enrollment Status" in the bulletin entitled *Admissions Regulations and General Academic Rules.* Students who have been approved for transfer to this College from other colleges of the University may apply for deletion of unrelated courses from their cumulative grade-point averages in accordance with established University policy. Such deleted courses are not removed from the permanent record card and may be recomputed in the cumulative grade-point average in the event of a subsequent intercollegiate transfer.

Curriculum Requirements for the Graduating Classes of 1977 and 1978

Curriculum requirements for programs of the College of Health Professsions which were in effect prior to June, 1975, continue to apply to students of the College of Health Professions who are members of the graduating classes of 1977 and 1978. These requirements include the specific requirements for majors, general degree requirements, and the Uniform College Requirements of Lowell State College. Students who transfer to the College of Health Professions from other institutions or from other colleges of the University and who are granted advanced standing in the classes of 1977 and 1978 are subject to all requirements in effect for these classes. For specific information concerning these requirements, students should consult the *Bulletin of Undergraduate Studies,* Lowell State College, 1974-1976, or should confer with their faculty advisors and major department chairpersons.

Required Liability Insurance

In addition to the health insurance coverage of the University, each student in the professional medical technology and nursing programs must demonstrate proof of purchase of malpractice liability insurance in September to the team coordinator for the junior and senior years. Consult faculty advisors for additional information concerning insurance brokers and standard fees.

Required Uniforms

In order to participate in the clinical portion of the upper-division curriculum, each nursing student is required to purchase an official uniform, insignia, appropriate shoes, a name pin, bandage scissors, and a watch with a second hand. Female nursing students also must purchase a cap and either a blue pin-striped laboratory coat or a navy-blue pants suit for community learning experiences. Male nursing students also must purchase for the community learning experiences a blue shirt and blue pants. Uniform, cap, name pin, and insignia can be purchased at the South Campus bookstore. In order to participate in the clinical portion of the upper-division curriculum, each

medical technology major is required to purchase a full-length laboratory coat, white shoes, insignia, and name pin. These may be purchased at the South Campus bookstore.

MAJOR PROGRAMS

Health Education

The Bachelor of Science degree with a major in health education is designed as a four-year program. The health education major offers a dual track program consisting of community health education and school health education. All students in the College take the core curriculum for the first three semesters, special prerequisite courses in the fourth semester, and courses in the professional major in fifth and following semesters. Course work in the junior and senior years includes studies in health, education, and upper-division electives plus community and public school apprenticeships.

The graduate of the health education program will be prepared to establish and teach health programs in such community agencies as public health departments, hospitals, industry, college health services, and health maintenance organizations. Students will also be qualified for teacher certification to establish and conduct health instruction in elementary and secondary schools.

Students pursuing teaching careers in health must apply to the Chairperson of the Department of Nursing at the end of the sophomore year for continuation in the health-education program. Such approval is granted in accordance with the regulations governing teacher-education programs as are cited below:

Application for Continuation in Health Education

1. The semester deadlines for filing an application for continuation in the Health Education program are April 1 and November 1.
2. Students are strongly advised to plan their programs of study so that they may file an application for continuation during the semester in which they will complete the sophomore year or four semesters of full-time study.
3. Students must file an application no later than the semester in which they will complete five semesters of full-time study. Special permission of the Dean of the College of Health Professions is required for an extension of this deadline. Students who transfer to the College with 60 or more semester credits should consult the Dean of the College of Health Professions concerning the time limit for filing an application.
4. Continuation in the program of health education requires, at a minimum, the achievement of a grade-point average of 2.50 for all required courses in education, together with a grade of "C" or better in each education course, and the achievement of grade-point averages of 2.50 in the major and in the total degree program, including transferred course work credited to the health-education curriculum.
5. Application forms for continuance in the health-education program of the College of Health Professions must be secured from and filed with the Department of Nursing.

Grading System

All courses in apprentice teaching are graded on the "S" or "U" basis. A grade of "S" in apprentice teaching courses indicates that a student's performance in teaching merits an evaluation of "C" or better. Supportive evidence of each student's performance in teaching is provided in his or her placement file and is made available to prospective employers. Course credits granted to students for courses to which a grade of "S" has been assigned are not computed in cumulative averages. Students who earn grades of "U" in apprentice teaching are automatically terminated in the health-education program. A grade of "U" entered on the student's permanent record card indicates that attempted course credits have not been granted. This grade does not prejudice the student's academic standing in the University since such credits are not counted toward the cumulative grade-point average.

Notification of Continuation in Health Education

Applicants for continuance in the health-education program will be notified in writing if their petitions have been rejected. Students who applied by the April 1 deadline will be notified by July 1. Those who applied by November 1 will be notified prior to the beginning of the spring semester. All decisions relative to termination of enrollment in the health-education program will be made jointly by the Department of Nursing and the Teacher-Education Committee of the University.

Students whose enrollments in health education have been cancelled may, if qualified, continue their enrollment in the University in another major, in which case they are advised to consult the Chairperson of the Department of Nursing immediately. Students who wish to transfer to programs of other colleges of the University are required to file the appropriate application for intercollegiate transfer within the University.

COURSE OF STUDY FOR HEALTH EDUCATION

Freshman Year

Fall Semester

42-101	College Writing	3
35-101	Anatomy & Physiology I	3
35-103	Anatomy & Physiology Lab I	1
*30-101	Intro. to Health Professions	2
47	Psychology Elective	3
	Elective	3
39-101	Physical Education	1
		16

Spring Semester

42-102	College Writing & Literature	3
35-102	Anatomy & Physiology II	3
35-104	Anatomy & Physiology Lab II	1
48	Sociology Elective	3
	Humanities Elective	3
39-102	Physical Education	1
		14

Sophomore Year

Fall Semester

35-251	Physiologic Sciences I	3
35-253	Physiologic Sciences Lab I	1
35-211	Basic Clinical Microbiology & Pathology	3
35-213	Basic Clinical Microbiology & Pathology Lab	1
30-202	Community Health	3
92	Computer Related Elective (Suggest 92-209)	3
42	Literature Elective	3
		17

Spring Semester

35-252	Physiologic Sciences II	3
35-254	Physiologic Sciences Lab II	1
48-231	The Family & Socialization	3
82-351	Human Sexuality	3
47-272	Abnormal Psychology	3
47-163	Developmental Psychology	3
		16

Junior Year

Fall Semester

47-328	Dynamics of Interpersonal Relations	3
45-301	Philosophy of Education or 45-302 Philosophical and Moral Issues in Education or 45-305 History of American Education	3
31-301	Contemporary Health Problems	3
84-252	Nutrition	3
	Elective (300-400 level)	3
		15

Spring Semester

31-304	Health Education Seminar	3
31-306	Introduction to Gerontology	3
45-322	Educational Psychology	3
31-302	Contemporary Health Problems	3
	Elective (300-400 level)	3
		15

Senior Year

Fall Semester

45-326	Sociology of Education or 45-327 Education and Social Inequality or 45-328 Social Organization of Schools & School Systems	3
31-403	Curriculum & Teaching of Health in the Community	3
31-407	Seminar in Health Education	3
31-405	Community Health Education Practicum	4
	Elective	3
		16

Spring Semester

31-402	Curriculum & Teaching of Health in the Elementary School	3
31-404	Curriculum & Teaching of Health in the Secondary School	3
31-406	Apprentice Teaching of Health in the Elementary School	4
31-408	Apprentice Teaching of Health in the Secondary School	4
		14

* Discontinued September 1977.

Health Services Administration

The Bachelor of Science degree with a major in health services administration is designed as a four-year program and is offered in cooperation with the College of Management Science. The specialization in health services administration begins in the junior year and is built upon a common core of foundation courses. Course work in the junior and senior years includes studies in health, business, upper-division electives and supervised administration internships in selected health agencies.

The graduate of the health services administration program will be prepared to function in middle management roles in hospitals or in primary management roles in nursing homes, public health agencies, health maintenance organizations, visiting nurse associations, and other community health agencies. Students who are interested in qualifying for Massachusetts licensure for Nursing Home Administration should consult Dean Barker prior to the end of their junior year.

COURSE OF STUDY FOR HEALTH SERVICES ADMINISTRATION

Freshman Year

Fall Semester

42-101	College Writing	3
35-101	Anatomy & Physiology I	3
35-103	Anatomy & Physiology Lab I	1
*30-101	Introduction to Health Professions	2
47	Psychology Elective	3
	Elective	3
39-101	Physical Education	1
		16

Spring Semester

42-102	College Writing & Literature	3
35-102	Anatomy & Physiology II	3
35-104	Anatomy & Physiology Lab II	1
48	Sociology Elective	3
	Humanities Elective	3
39-102	Physical Education	1
		14

Sophomore Year

Fall Semester

35-251	Physiologic Sciences I	3
35-253	Physiologic Sciences Lab I	1
35-211	Basic Clinical Microbiology & Pathology	3
35-213	Basic Clinical Microbiology & Pathology Lab	1
30-202	Community Health	3
92	Computer Related Elective (Suggest 92-209)	3
42	Literature Elective	3
		17

Spring Semester

35-252	Physiologic Sciences II	3
35-254	Physiologic Sciences Lab II	1
90-101	Mathematical Analysis	3
47-163	Developmental Psychology	3
47-272	Abnormal Psychology	3
32-306	Introduction to Gerontology	3
		16

* Discontinued September 1977.

Junior Year

Fall Semester

60-201	Accounting Prin. I.	3
64-201	Economics I	3
64-211	Economics Statistics I	3
47-328	Dynamics of Interpersonal Relations	3
32-301	Contemporary Health Problems	3
		15

Spring Semester

60-202	Accounting Prin. II	3
64-202	Economics II	3
64-212	Economics Statistics II	3
32-310	Seminar in Health Services Administration	3
32-302	Contemporary Health Problems	3
		15

Senior Year

Fall Semester

32-408	Legal Aspects of Health Facilities	3
66-200	The Business System	3
32-409	Field Service in Health Services Administration I	6
	Elective (300-400 level)	3
		15

Spring Semester

32-410	Field Service in Health Services Administration II	10
32-412	Seminar in Health Services Administration	3
	Elective (300-400 level)	3
		16

Medical Technology

The Department of Clinical Laboratory Sciences offers a major specialization in medical technology leading to the degree of Bachelor of Science. The Department, in partnership with area hospitals, has developed an integrated program for medical technology education, the major thrust of which is the bringing together of the didactic and laboratory portions of the traditional clinical internships in on-campus settings. The didactic, laboratory, and clinical experiences are arranged over a two-year period and are integrated to provide upward mobility for current practitioners in the field, including associate degree graduates with M.L.T. (ASCP) registry or with C.L.A. (ASCP) registry without academic credentials. The curriculum combines the education and training of the generalist with the opportunity to satisfy supervisory, educational or research-oriented interests and has received initial approval from the National Accrediting Agency for Clinical Laboratory Sciences. Graduates of the medical technology program are eligible to take the Medical Technologist's Registry Examination of the American Society of Clinical Pathologists.

Transfer Policy for MLT (ASCP) Students

MLT (ASCP) students may challenge courses by taking departmental equivalency examinations or any of the appropriate examinations of the College Level Examination Program. A minimum grade of "BC" (2.50) in departmental course equivalency examinations is required for credit.

COURSE OF STUDY FOR MEDICAL TECHNOLOGY

Freshman Year

Fall Semester

42-101	College Writing	3
35-101	Anatomy & Physiology I	3
35-103	Anatomy & Physiology Lab I	1
*30-101	Intro. to Health Professions	2
47	Psychology Elective	3
	Elective	3
39-101	Physical Education	1
		16

Spring Semester

42-102	College Writing & Literature	3
35-102	Anatomy & Physiology II	3
35-104	Anatomy & Physiology Lab II	1
48	Sociology Elective	3
	Humanities Elective	3
39-102	Physical Education	1
		14

Sophomore Year

Fall Semester

35-251	Physiologic Sciences I	3
35-253	Physiologic Sciences Lab I	1
35-211	Basic Clinical Microbiology & Pathology	3
35-213	Basic Clinical Microbiology & Pathology Lab	1
30-202	Community Health	3
92	Computer Related Elective (Suggest 92-209)	3
42	Literature Elective	3
		17

Spring Semester

35-252	Physiologic Sciences II	3
35-254	Physiologic Sciences Lab II	1
92-117	Introduction to Calculus (or equivalent)	3
	Electives	6
+ 36-241	Basic Laboratory Skills	2
		15

Junior Year

Fall Semester

36-341	Fundamentals of Clinical Chemistry	3
36-343	Fundamentals of Clinical Chemistry Laboratory	2
36-361	Medical Instrumentation	3
36-363	Medical Instrumentation Laboratory	2
36-321	Hematology	3
36-232	Hematology Laboratory	2
		15

Spring Semester

36-350	Human Biochemistry	3
36-351	Clinical Biochemistry I	3
36-353	Clinical Biochemistry I Lab	2
36-311	Medical Microbiology	3
36-313	Medical Microbiology Lab	2
36-420	Clinical Hematology Practicum	2
		15

Senior Year

Fall Semester

35-335	Medical & Clinical Genetics	2
35-337	Medical & Clinical Genetics Laboratory	1
36-452	Clinical Biochemistry II	1
36-454	Clinical Biochemistry Laboratory II	2
36-331	Immunology	1
36-333	Immunology Laboratory	1
36-332	Immunohematology	1
36-334	Immunohematology Lab	1
36-410	Clinical Microbiology Practicum	2
36-461	Automation	3
		15

Spring Semester

36-473	Medical Technology Seminar	3
36-430	Clinical Immunohematology Practicum	2
36-450	Clinical Biochemistry Practicum	2
36-432	Adv. Medical Microbiology	3
36-434	Adv. Medical Micro. Lab.	2
	Unrestricted Elective(s)	3-6
		15-18

+ Changed to 4 credits beginning September 1977.

* Discontinued September 1977.

Nursing

The Bachelor of Science degree with a major in nursing is designed as a four-year program. Major courses in nursing are offered within the Department of Nursing and are under the direct control and supervision of the faculty of nursing. The clinical aspects of the nursing program are developed, coordinated and supervised by the nursing faculty and are provided in collaboration with members of the following community agencies: D'Youville Manor, Lawrence General Hospital, Lowell Housing Authority, Lowell Association for Retarded Children, Lowell Day Nursery, Lowell General Hospital, Lowell Public Health Department, Lowell Visiting Nurse Association, Medical Associates of Chelmsford, Saint John's Hospital, Saint Joseph's Hospital, Solomon Mental Health Center, Tewksbury Hospital, Mathew Thornton Clinic, Living and Learning School, Inc., Lawrence Day Treatment for Adults, and Veteran's Administration Hospital, Bedford. Graduates of the nursing program are prepared to function in a variety of settings, such as hospitals, visiting nurse associations, nursing homes, and are eligible to sit for Massachusetts State Board of Registration in Nursing examination for licensure as a Registered Nurse. The nursing program is approved by the Massachusetts State Board of Registration in Nursing and is fully accredited by the National League for Nursing.

Philosophy of the Faculty of Nursing

The nursing faculty believe that preparation for professional nursing should take place at the baccalaureate level and that the nursing major should be built upon an educational base of the liberal arts and sciences. Thus the faculty of nursing accepts the philosophy of the College of Health Professions, of which it is a part.

The nursing faculty believe that man is a unique, rational being who has needs for safety and security, love and belonging, esteem and self-actualization and who interacts purposefully in a changing environment. Man is also perceived by the nursing faculty as a continually developing individual possessing innate rights enabling him to make choices and establish goals which determine his future. Fundamental to these rights is the right of well-being which includes a level of health achieved through need satisfaction that allows the individual to function within his social system and allows for growth and development.

The faculty also believes that education is a self-actualizing creative lifetime endeavor which involves experiences and interaction among individuals and which moves from the simple to the complex and that education allows for continuous independent and cooperative inquiry, critical analysis and judgment which enables the learner to function as a contributing member of the community. The dual purposes of the baccalaureate program for nursing are to prepare a liberally educated person with specialized preparation for the practice of first level professional nursing and to provide a foundation for graduate study.

As a service to man and society, professional nursing, through use of the nursing process, seeks to promote health and prevent illness by assisting the individual, the family and the community in the pursuit of well-being. The faculty believes that nursing is an interacting process among and for individuals in a knowing, doing, and caring relationship which "assists the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge. And to do this in such a way as to help him gain independence as rapidly as possible."

The changing health needs of society and concommitant expansion of scientific technology demand that the baccalaureate nursing graduate, as a beginning professional nurse, be accountable, and respond to these needs and advances in order to facilitate and to assist in the coordination of the delivery of humanistic health care services with members of other health professions.

The faculty believes that the graduate, as a beginning professional nurse, is prepared to provide professional nursing care through utilization of the nursing process in primary care settings where the focus of health care delivery is on health development, prevention of illness, and maintenance of health; in acute care settings where curing and restorative services are provided; and in long-term care settings where the emphasis is on rehabilitation and maintenance. The graduate is characterized by an attitude of scientific inquiry regarding nursing practice. As a provider of professional nursing care, the graduate of the program can function as a teacher, a change agent, and advocate, an investigator, a collaborator, a counselor, and a manager.

Objectives of Nursing Program

The objectives of the baccalaureate program in Nursing at the University of Lowell are to provide students with opportunities that contribute to the ability to think effectively, to analyze critically, to communicate relevantly, and to acquire knowledge of the basic theories, skills and techniques which are inherent to the practice of professional nursing.

Upon successful completion of the program in Nursing at the University of Lowell, graduates are prepared for the beginning practice of professional nursing. Given the appropriate opportunities, the graduate of the program can accomplish the following:

1. Value the dignity and worth of man, his capacity for self-realization and his ability to reason;
2. Maintain effective interpersonal relationships based on an awareness of self and the knowledge that all behavior is meaningful;
3. Use sensory perceptions to obtain and translate pertinent data relative to the individual and/or family health status;
4. Assess health needs of individuals and families of all ages in various settings;
5. Indentify principles from the behavioral, natural, biological sciences, and the humanities and utilize these principles in the practice of professional nursing;
6. Make critical judgments in order to plan, implement and evaluate nursing care in a variety of settings;
7. Interpret and demonstrate nursing care to patients and their families, to assisting personnel, and to members of other professions;
8. Promote health and prevent illness by assisting the individual, the family, and the community in the pursuit of well-being;
9. Utilize research findings selectively in the practice of professional nursing;
10. Maintain an attitude of scientific inquiry regarding professional nursing practice;
11. Participate in nursing and other health-care research;
12. Demonstrate an awareness of the effect that social and physical forces have upon man and his environment;
13. Participate in planning and implementing community health programs;
14. Realize and accept responsibility for continuous growth as a person, as a professional practitioner, and as a contributing member of society;

15. Develop an increasing capacity to effect change for man's well-being through responsible leadership and progress without further formal education to positions requiring beginning administrative skills;
16. Identify the contemporary and future role of the professional nurse and assume the responsibility for becoming a role model: and
17. Pursue graduate study for the purpose of achieving competence in a special field of nursing.

Transfer Policies for Registered Nurses

Registered nurses who are graduates of diploma and associate degree nursing programs may be admitted to the nursing program subject to University regulations concerning "Advanced Placement with Course Credit Through Examinations." Students who may be interested in such examination credit should consult appropriate sections of the publication concerning *Admissions Regulations and General Academic Rules.*

R.N. students may challenge department designated nursing courses by taking course examinations of the Department of Nursing. A grade of "BC" (2.50) must be obtained in departmental equivalency examinations for equivalency credit to be recommended by the nursing faculty.

The credentials of each R.N. applicant for credit will be considered individually on their own merits, but in no case may a student reduce the basic residency requirement of the University through any combination of transfer, advanced placement with credit, or course equivalency procedures.

For retention in the program, the same requirements must be met by R.N. students as are met by declared nursing majors.

COURSE OF STUDY FOR NURSING (Classes of 1978 and 1979)

Freshman Year

Fall Semester

42-101	College Writing	3
35-101	Anatomy & Physiology I	3
35-103	Anatomy & Physiology Lab I	1
30-301	Introduction to Health Sciences (either semester)	2
47	Psychology Elective	3
	Elective	3
39-101	Physical Education	1
		16

Spring Semester

42-102	College Writing & Literature	3
35-102	Anatomy & Physiology II	3
35-104	Anatomy & Physiology Lab II	1
48	Sociology Elective	3
	Humanities Elective	3
39-102	Physical Education	1
		14

Sophomore Year

Fall Semester

35-251	Physiologic Sciences I	3
35-253	Physiologic Sciences Lab I	1
35-211	Basic Clinical Microbiology & Pathology	3
35-213	Basic Clinical Microbiology & Pathology Lab	1
30-202	Community Health (either semester)	3
92	Computer Related Elective (Suggest 92-209)	3
42	Literature Elective	3
		17

Spring Semester

35-252	Physiologic Sciences II	3
35-254	Physiologic Sciences Lab II	1
30-206	Elementary Statistical Analysis	3
47-163	Developmental Psychology	3
47-262	Abnormal Psychology	3
	Electives	3
		16

Junior Year #

Fall Semester

33-301	Nursing Science I Lecture	4
33-303	Nursing Science I Seminar	1
33-305	Nursing Science I History/ Physical Assessment Lecture	1
33-307	Nursing Science I History/ Physical Assessment Lab	1
33-309	Nursing Science I Psychiatric Nursing Practicum & Integration	1
33-313	Nursing Science I Clinical Hospital Lab	2.5
33-315	Nursing Science I Maternal Child Health/Nursery School/Family Lab	2.5
33-317	Nursing Science I A.V. Simulation Laboratory	1
47-328	Dynamics of Interpersonal Relations (either semester)	3
		17

Spring Semester

33-302	Nursing Science II Lecture	4
33-304	Nursing Science II Seminar	1
33-306	Nursing Science II History/ Physical Assessment Lecture	1
33-308	Nursing Science II History/ Physical Assessment Lab	1
33-310	Nursing Science II Psychiatric Nursing Practicum & Integration	1
33-312	Nursing Science II Clinical Maternal & Child Health Lab	2.5
33-314	Nursing Science II Clinical Medical Surgical/Family Psychology Nursing Lab	2.5
33-316	Nursing Science II A.V. Simulation Lab	1
	Elective (either semester)	3
		17

Senior Year #

Fall Semester

33-401	Nursing Science III Lecture	5
33-402	Nursing Science III Seminar	1
33-403	Nursing Science III Clinical Hospital Laboratory	3
33-404	Nursing Science III Community Laboratory	3
33-405	Nursing Science III Clinical History/Physical Exam Recitation	1
	Elective (300 - 400 level)	3
		16

Spring Semester

33-406	Nursing Science IV Lecture	4
33-407	Nursing Science IV Seminar	1
33-408	Nursing Science IV A.V. Simulation Laboratory	.5
33-409	Nursing Science IV Clinical Hospital Laboratory	3
33-410	Nursing Science IV Community Laboratory	3
33-411	Nursing Science IV Clinical History/ Physical Exam. and Practicum	.5
	Elective (300 - 400 level)	3
		15

# Curriculum for the junior and senior years is for the Class of 1978 only. Members of the Class of 1979 follow the curriculum for the junior and senior years as specified for the Class of 1980 and following classes.

COURSE OF STUDY FOR NURSING (Class of 1980 and Following Classes)

Freshman Year

Fall Semester

42-101	College Writing	3
35-101	Anatomy & Physiology I	3
35-103	Anatomy & Physiology Lab I	1
*30-301	Introduction to Health Sciences (either semester)	2
47	Psychology Elective	3
	Elective	3
39-101	Physical Education	1
		16

Spring Semester

42-102	College Writing & Literature	3
35-102	Anatomy & Physiology II	3
35-104	Anatomy & Physiology Lab II	1
48	Sociology Elective	3
	Humanities Elective	3
39-102	Physical Education	1
		14

Sophomore Year

Fall Semester

35-251	Physiologic Sciences I	3
35-253	Physiologic Sciences Lab I	1
35-211	Basic Clinical Microbiology & Pathology	3
35-213	Basic Clinical Microbiology & Pathology Lab	1
30-202	Community Health (either semester)	3
92	Computer Related Elective (Suggest 92-209)	3
42	Literature Elective	3
		17

Spring Semester

35-252	Physiologic Sciences II	3
35-254	Physiologic Sciences Lab II	1
30-206	Elementary Statistical Analysis	3
47-163	Developmental Psychology	3
47-232	Theories of Personality	3
33-202	Basic Principles for Nursing Practice	3
		16

Junior Year

Fall Semester

33-301	Nursing Science I Lecture	4
33-302	Nursing Science I Basic Clinical Module	3
33-303	Nursing Science I Maternal Child Health/ Clinical Module	3
33-304	Nursing Science I Psychosocial Assessment	1
33-305	Nursing Science I History/ Physical Assessment Lecture	1
33-306	Nursing Science I History/ Physical Assessment Lab	1
33-307	Nursing Science Seminar	1
	Elective	3
		17

Spring Semester

33-309	Nursing Science II Lecture	4
33-310	Nursing Science II Medical/ Surgical/Psychiatric Nursing Clinical Module	3
33-311	Nursing Science II Maternal Child Health/Community Clinical Module	3
33-312	Nursing Science II Phychosocial Assessment	1
33-313	Nursing Science II History/ Physical Assessment Lecture	1
33-314	Nursing Science II History/ Physical Assessment Lab	1
33-315	Nursing Science II Seminar	1
	Elective (either semester)	3
		17

Senior Year

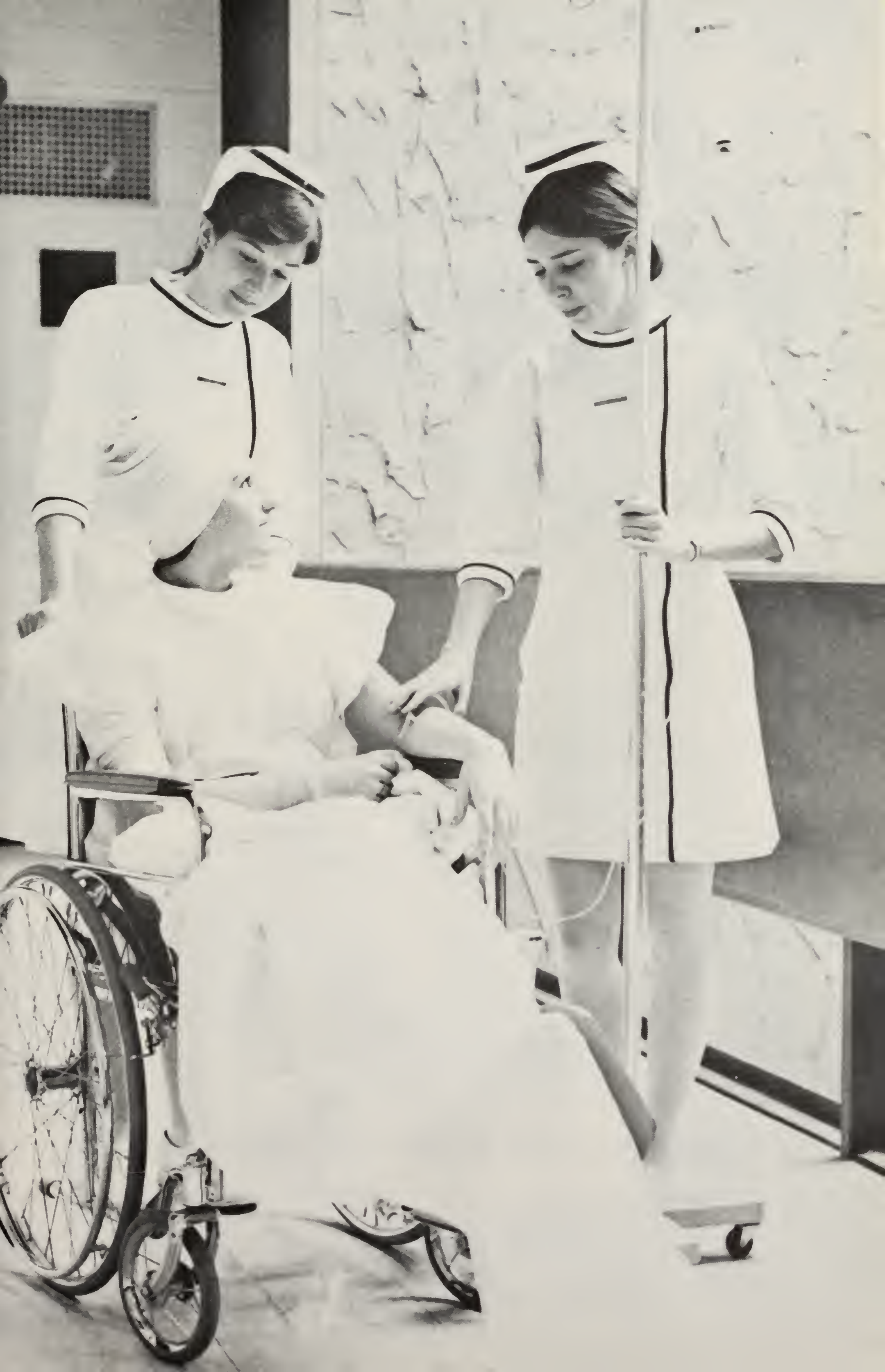
Fall Semester

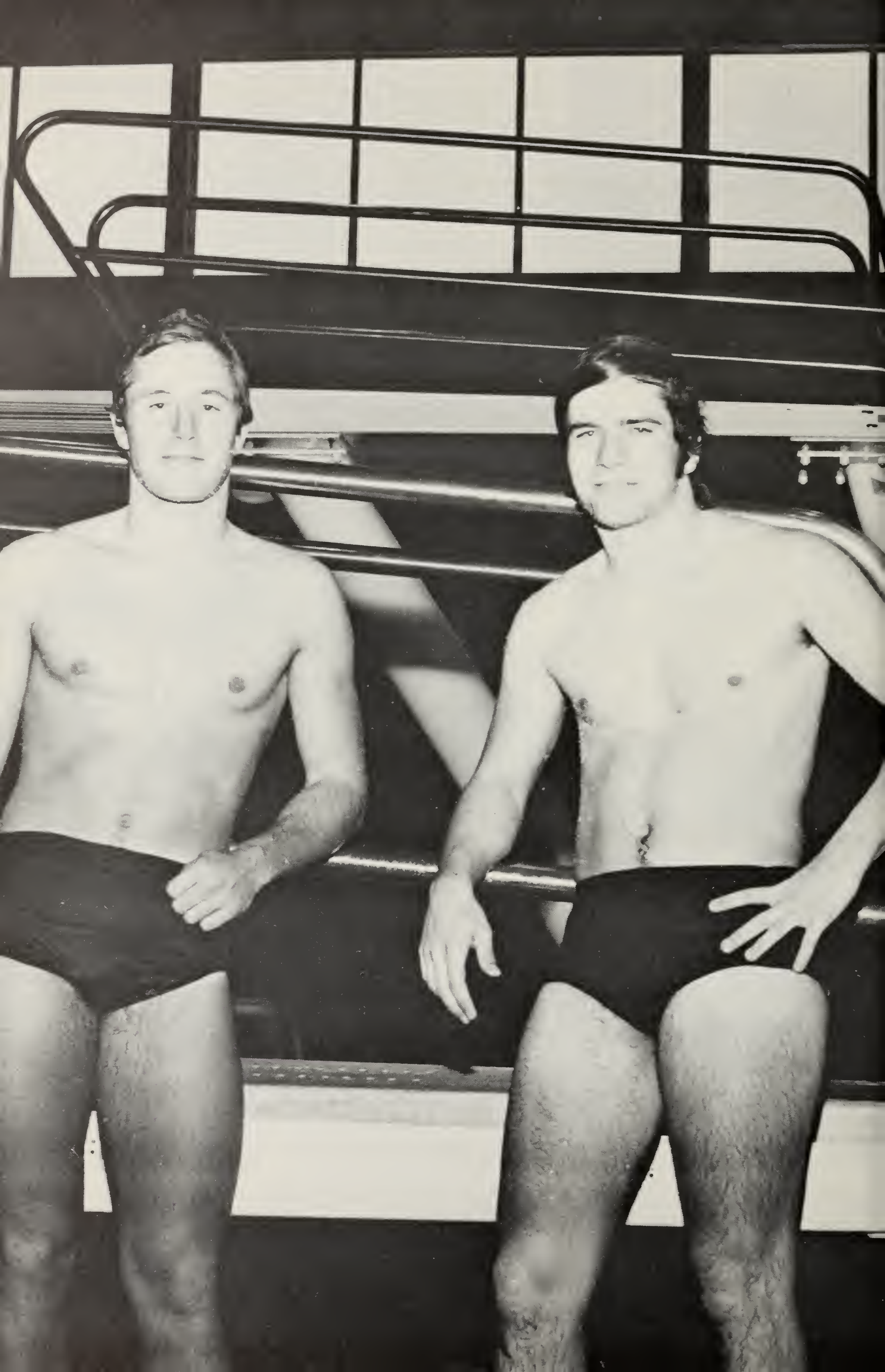
33-401	Nursing Science III Lecture	5
33-402	Nursing Science III Seminar	1
33-403	Nursing Science III Clinical Hospital Laboratory	3
33-404	Nursing Science III Community Laboratory	3
33-405	Nursing Science III Clinical History/Physical Exam Recitation	1
	Elective (300 - 400 level)	3
		16

Spring Semester

33-406	Nursing Science IV Lecture	4
33-407	Nursing Science IV Seminar	1
33-408	Nursing Science IV A.V. Simulation Laboratory	.5
33-409	Nursing Science IV Clinical Hospital Laboratory	3
33-410	Nursing Science IV Community Laboratory	3
33-411	Nursing Science IV Clinical History/Physical Exam. and Practicum	.5
	Elective (300 - 400 level)	3
		15

* Discontinued September 1977.





PHYSICAL EDUCATION

The physical education program of the University has as its general objective the development of basic motor skills which will enhance the productive use of leisure time. More specifically, the program seeks to improve individual health through increased organic vigor, to develop effective sports skills, to attain desirable standards of team conduct, and to promote life-time interest in physical activity. In attaining these objectives, students are encouraged to select courses from both team and individual activities.

All freshmen and transfer students are required to take a swimming test before initiating the physical activities program. Students who are unable to swim are encouraged to take a course in beginning swimming for the purposes of developing basic survival skills and acquiring a level of personal confidence fundamental to aquatic leisure activity.

Activity Courses

All students must successfully complete one year of supervised physical activity in fulfillment of the University Core Requirements unless excused upon written confirmation of permanent physical disability by a physician. Students who are veterans may at their option be excused from the activities requirement in recognition of the physical activities program of basic training which is common to the several armed forces. Courses which satisfy the activities requirement are offered with a prefix number of "39". These courses are subdivided into parts in order to make possible a greater range of activity involvement. Courses which are offered during the first half of a semester carry the letter notation of A. Courses which are offered during the second half of a semester carry the letter notation of B.

Theory Courses

Theory courses may be elected by students who are interested in receiving theoretical instruction concerning recreation, coaching, fitness and nutrition, and care and prevention of athletic injuries. These courses do not satisfy the requirements of the University Core concerning physical activities but may be counted as "unrestricted elective courses" in the student's program of studies. Theory courses are offered with a prefix number of "38".

Minor Area of Study in Coaching

A minor in Physical Education and Coaching consists of 18-24 credits, 15 of which are specified core requirements.

Core Requirements

38-100: Care and Prevention of Athletic Injuries
38-210: Psychology of Coaching
38-322: Practicum in Athletics
38-420: Kinesiology
38-450: Physiological Aspects of Coaching

Additional courses are selected from the offerings of the Department of Physical Education with a "38" prefix.

COURSE DESCRIPTIONS

Each course offering is designated by a two-digit college prefix and a three-digit course number. The two-digit college prefix identifies a college department and/or special subject area. In some cases the prefix also identifies laboratory or lecture courses and courses which are primarily for majors and minors. The three-digit course number identifies the course level.

COURSE PREFIXES

The following numerical prefixes are assigned to the Department of Aerospace Studies and the seven colleges:

Aerospace Studies	29	Liberal Arts	40-59
Education	01-09	Management Science	60-69
Engineering	10-28	Music	70-79
Health Professions	30-39	Pure & Applied Sciences	80-99

Course prefixes assigned by the College of Health Professions are as follows:

Clinical Laboratory Sciences	35	Medical Technology	36
Health	30	Nursing	33
Health Education	31	Physical Activites	39
Health Services Administration	32	Physical Education	38

COURSE NUMBERS

Courses numbered 001-049 are prefreshman and special undergraduate courses and do not carry baccalaureate degree credit. Those numbered 100-299 are lower-division undergraduate courses and those numbered 300-499 are upper-division undergraduate courses. The 400 level courses are generally limited to juniors and seniors majoring in a field but are open, with permission, to other advanced undergraduates and to graduate students. Directed studies courses and practicum experience courses are generally limited by departmental policy to students majoring in the area in which such courses are offered. Courses numbered 500-599 are graduate courses which are open to upper-division undergraduates with the consent of instructors and chairpersons. Courses numbered 600-699 are graduate courses which are open only to graduate students. Courses numbered 700-799 designate graduate research projects and graduate theses.

SEMESTER, CLASS, AND CREDIT DESIGNATIONS

Courses which are offered during the fall semester are designated by the Roman Numeral I; spring semester courses are designated by the Roman Numeral II, and courses which are offered during both fall and spring semesters are designated by the Roman numerals I and II. Courses which are not prescheduled for specific semesters carry no Roman numerical designation. In the event that a course is given during the first half of a semester, the Roman number is followed by the letter A. A course which is given during the second half of a semester is followed by the letter B.

Arabic numbers enclosed in parentheses indicate the number of hours of lecture/recitation and of laboratory/applied activity. The Arabic number following the numbers in parentheses is a designation of course credit. For example, the designation IB (6,0) 3 means that a course is offered during the second half of the fall semester, requires 6 hours of lecture/recitation per week, and carries 3 semester credits. Similarly, the designation II (2,6) 4 means that a course is offered during the spring semester, requires 2 hours of lecture/recitation per week and 6 hours of laboratory/applied activity per week, and carries four semester credits.

COURSE RESTRICTIONS

Special course prerequisites, corequisites, and enrollment restrictions are indicated at the end of the course description. A course which is listed as a prerequisite must have been completed and passed prior to taking the course for which the prerequisite is specified. An exception to this limitation may be granted by the designated instructor only. A course which is listed as a corequisite must be taken during the same semester as the course for which the corequisite is specified. Courses which carry such notations as "open for majors only" and "sophomore status required" are restricted to the specified students. Courses which carry the notation "permission of instructor" require instructor approval prior to filing enrollment cards with the Office of Registrar. Courses at the 100-300 levels which do not carry prerequisite, corequisite and enrollment restrictions are open for election by all students unless general restrictions have been listed under the department or course area heading.

INSTRUCTOR DESIGNATION

The instructor who is designated to teach a course for the current academic year may be listed at the end of the course description. Courses which carry no instructor designation are taught by members of the department or by unassigned faculty members.

DEPARTMENT OF CLINICAL LABORATORY SCIENCES

Clinical Sciences (Course Prefix 35)

35-101 ANATOMY & PHYSIOLOGY I I (3,0) 3

An introduction to the study of the human organism relating structure and function. Among the topics treated are cytology, histology, the skeletal system, the muscular system, the nervous system and the circulatory system. The course is designed to provide students with a working knowledge of human anatomy and physiology through an understanding of the fundamental principles involved in the structures and functions of the body, through interrelationships and through feedback mechanisms. Clinical applications will be presented. Corequisite: 35-103. Bruce, Farina.

35-102 ANATOMY & PHYSIOLOGY II II (3,0) 3

A continuation of the study of the human organism relating structure and function. Among the topics treated are the circulatory, respiratory, digestive, excretory, endocrine and reproductive systems of man. The course is designed to provide students with a working knowledge of human anatomy and physiology through an understanding of the fundamental principles involved in the structures and functions of the body, through interrelationships and through feedback mechanisms. Clinical applications will be presented. Prerequisites: 35-101, 103. Corequisites: 35-104. Bruce, Farina.

35-103 ANATOMY & PHYSIOLOGY LABORATORY I I (0,3) 1

The laboratories are designed to reinforce didactic material by practical exposure to the subject matter. A second major outcome will be an understanding of laboratory methodology—viz, a thoughtful approach to problems, precise procedures and an appreciation of variables. Corequisite: 35-101. Bruce, Farina.

35-104 ANATOMY & PHYSIOLOGY LABORATORY II II (0,3) 1

The laboratories are designed to reinforce didactic material by practical exposure to the subject matter. A second major outcome will be an understanding of laboratory methodology—viz, a thoughtful approach to problems, precise procedures and an appreciation of variables. Prerequisites: 35-101, 103. Corequisite: 35-102. Bruce, Farina.

35-211 BASIC CLINICAL MICROBIOLOGY AND PATHOLOGY I, II (3,0) 3

The course is designed to study the fundamentals of microbiology with major emphasis on the structure and function, growth and metabolism and classification of clinically important microorganisms; the origin and mechanism by which microorganisms produce disease; the human body's response to invading microbes; and introduction to the ecological aspects of microorganisms in the environment with particular stress on their significance, activities (beneficial and detrimental) and control measures. Prerequisites: 35-101, 102, 103, 104. Corequisite: 35-213. Lam.

35-213 BASIC CLINICAL MICROBIOLOGY AND PATHOLOGY LABORATORY I, II (0,3) 1

Laboratory investigations of basic properties and characteristics of microorganisms; the student will perform commonly used techniques for collecting, handling and studying clinically important microorganisms. Prerequisites: 35-101, 102; 35-103, 104. Corequisite: 35-211. Lam.

35-251 PHYSIOLOGICAL SCIENCE I I (3,0) 3

An amplification of the principles of physiology important to a thorough understanding of the function and pathology of the human organism. Nuclear medicine will be discussed with major emphasis on diagnostic and therapeutic applications. Fluid balance, dehydration and mineral metabolism will be covered with a look at selected inorganic species and their roles in normal and pathologic states of health. Oxygen, basal metabolism and biological oxidation will be discussed in depth. The process of respiration will be covered in detail, including oxygen and carbondioxide transport, buffering systems, acidosis, alkalosis and compensation mechanisms. The role of enzymes as biochemical catalysts will be discussed along with their clinical significance in enzymic defect diseases. Lipids will be considered, including their significance in normal and pathologic states and their metabolic significance. Prerequisites: 35-101, 102; 35-103, 104, Corequisite: 35-253. Frechette.

35-252 PHYSIOLOGICAL SCIENCE II — II (3,0) 3

A continuation of 35-251. Carbohydrates, proteins, purines, pyrimidines and their metabolic cycles will be considered in depth with a study of selected diseases and/or pathological conditions resulting from abnormalities in the cycles. The major hormones controlling metabolism will be studied including the interrelationships of the secreting glands and the target organs. The digestive process and absorption and excretion from the gastrointestinal tract will be discussed. The role of vitamins in nutrition will be surveyed. Blood, lymphatic and cerebrospinal fluid will be studied with emphasis placed on their use as clinical indicators of body function. Kidney and liver function and testing will be explored along with the formation and clinical significance of porphyrins and bile pigments. Selected biochemical aspects of the tissues will be presented. Prerequisite: 35-251. Corequisite: 35-254. Frechette.

35-253 PHYSIOLOGICAL SCIENCE LABORATORY I — I (0,3) 1

The properties of solutions, colloids, osmosis, dialysis, ionization, pH and buffers will be studied. The role of essential elements in living systems and the action of toxic species will be evaluated. The use of chromatography as a clinical tool will be illustrated. Basic quanitative skills will be developed, including a study of the laws of photometry. Major emphasis will be on body fluid analysis. Prerequisites: 35-101, 102; 35-103, 104. Corequisite: 35-251. Frechette.

35-254 PHYSIOLOGICAL SCIENCE LABORATORY II — II (0,3) 1

The properties of the basic biochemical substances will be studied. Compound lipids will be isolated; carbohydrates, proteins and enzymes will be examined along with their roles in normal and abnormal physiology. RNA will be isolated and its chemical composition determined. Qualitative and semi-qualitative analysis will be carried out on normal and pathological blood samples and urinary calculi. Extensive kidney and liver function testing will be performed along with quantitative analysis of selected serum constituents such as amylase, lipase and salicylates. Prerequisites: 35-251, 253. Corequisite: 35-252. Frechette.

35-356 PHARMACOLOGY — II (3,0) 3

Physical and chemical relationships underlying drug action, dosage and response by tissue systems, kinetics of drug action. Evaluation of mechanisms of action, incompatibilities, toxic effects, and modern drug usage in man. Major topics covered will be general and local anesthetics, antihistamines, central nervous stimulants and depressants, chemotherapy, immunopharmacology, respiratory and gastrointestinal drugs. Additional new topics from the current literature will be discussed. Useful applications of drug interactions and commercial preparations will be included. Prerequisites: 35-252, (or equivalent). Frechette.

35-550 BIOMEDICAL ASPECTS AND PATHOPHYSIOLOGY OF AGING — I (3,0) 3

Study of various biological and pathophysiological factors of health and disease in the aging process using the systems approach. This course covers biological theories of aging; the effect of aging on the physiology of man; the natural history of aging; aging at the cellular and tissue level; genetic components of longevity; and molecular and chemical mechanisms of aging. Altered regulatory mechanisms as related to the aging process at the cellular, tissue and organ level are studied. TBA.

Medical Technology (Coures Prefix 36)

Restricted to Medical Technology Majors

36-241 BASIC LABORATORY SKILLS I (3,3) 4

This course is designed to develop and refine specific areas of knowledge and skills needed by all Medical Technology students before entering into the clinical areas of laboratory study. Quantitative mathematical skills, volumetric procedures and basic physical principles will be presented. Quality control procedures and techniques and their applications to control and prediction of trends in accuracy and precision of clinical laboratory data will be discussed. Allard, Farina, Frechette, Post.

36-311 MEDICAL MICROBIOLOGY I I (3,0) 3

A study of the cultural, biochemical, serological and pathogenic characteristics of disease producing microorganisms. Emphasis will be placed on the pathophysiology of the infectious diseases and its relationship to isolation and identification of the pathogenic microorganisms. Prerequisites: 35-211, 213. Corequisite: 36-313. Lam.

36-313 MEDICAL MICROBIOLOGY LABORATORY I I (0,4) 2

Emphasis will be placed on the identification of pathogenic microorganisms and differentiating them from closely related species which represent man's indigenous flora. Corequisite: 35-311. Post.

36-321 CLINICAL HEMATOLOGY I I (3,0) 3

A study of the human hematopoietic system and its relationship to other organ systems. Discussions will include morphological and biochemical relationship of erythropoiesis and leukopoiesis in health and disease states. A study of the mechanics and relationship of blood coagulation as it pertains to health and disease states will also be included. Prerequisites: 35-101, 102; 35-251, 252. Corequisite: 36-323.

36-323 CLINICAL HEMATOLOGY LABORATORY I I (0,4) 2

Emphasis will be placed on current hematologic tests and coagulations used in today's clinical laboratory. In addition, the clinical implications of these tests to diagnosis, monitor and evaluate various health and diseased processes will be discussed. Corequisite: 36-321.

36-331 IMMUNOLOGY — IMMUNOHEMATOLOGY I (3,0) 3

A general introduction to the principles of immunology including: definition of antigens and antibodies; description of cellular events and the immune response; theories of antibody formation; hypersensitivity states; and diseases associated with altered responsiveness of the immune system. Current concepts and blood transfusion technology including discussions of the chemical nature and immunological interactions of blood group substances. Included is the discussion of the genetic distribution of blood isoantigens. Prerequisites: 36-311, 313. Corequisite: 36-333. Bruce.

36-333 IMMUNOLOGY — IMMUNOHEMATOLOGY LABORATORY I (0,4) 2

A study of the antibody-antigen reactions and the use of current techniques employed for their assay. Discussions of the immunological responses of the host-infectious agent interaction and their demonstration via techniques such as precipitation, agglutination, complement fixations. Corequisite: 36-331.

36-341 FUNDAMENTALS OF CLINICAL CHEMISTRY I (3,0) 3

A study of the principles that govern the properties, reactions, methods of preparation, isolation and identification of organic compounds. A study of the major classes of compounds of the group IV, V, and VI, elements of the periodic table. Prerequisites: 35-251, 252. Corequisite: 36-343.

36-343 FUNDAMENTALS OF CLINICAL CHEMISTRY LABORATORY I (0,4) 2

Laboratory consists of organic synthesis, separation of mixtures according to solubility and functional groups and identification by crystalization, through layer chromatography, gas phase chromatography and identification of compounds on the basis of physical properties including spectra. Prerequisites: 35-253, 254. Corequisite: 36-341.

36-350 HUMAN BIOCHEMISTRY II (3,0) 3

An in depth study of biochemical substances and their reactions in the human body. Emphasis will be placed on metabolism of cells, tissues and organs. Those biochemical processes which underlie pathological conditions will be emphasized. Prerequisites: 35-251, 252; 36-341, 343.

36-351 CLINICAL BIOCHEMISTRY I II (3,0) 3

A detailed study of the specific biochemical substances in the human body which are of clinical significance. Normal and abnormal constituents will be considered, along with variables which affect their presence and concentrations in the human organism. Prerequisites: 35-251, 252; 36-341, 343, 361. Corequisites: 36-350, 353.

36-353 CLINICAL BIOCHEMISTRY LABORATORY I II (0,4) 2

This course is intended to instruct the student in the analytical procedures and the methods currently used in clinical laboratories. Emphasis will be placed on blood and urine analysis, including enzyme activity. Methods of instrumentation, calibration and quality control will be emphasized. Prerequisites: 35-251, 252; 36-341, 343, 363. Corequisite: 36-351. Allard.

36-361 MEDICAL INSTRUMENTATION I (3,0) 3

Course will include an introduction to basic electricity and electronic circuitry along with the use of measurement devices such as the VTVM and the oscilloscope. The applications of digital electronics and and operational amplifiers in clinical instrumentation will be illustrated. The components of spectrophotometers, servo devices, electrometric equipment and radiation instrumentation will be discussed with major emphasis placed on the mechanism of operation, electrical, mechanical and optical considerations, signal amplification characteristics and preventative maintainence and troubleshooting. Prerequisites: 35-251, 252. Corequisite: 36-363.

36-363 MEDICAL INSTRUMENTATION LABORATORY I I (0,4) 2

Students will perform experiments in basic AC-DC electricity, electronic circuitry and digital electronics. The electrical, mechanical and optical characteristics of common clinical laboratory instruments will be studied in depth. Students will be expected to become proficient in preventative maintenance and minor troubleshooting of instrumentation. Corequisite: 36-361. Restriction: Limited to Medical Technology majors. Frechette.

36-401 INTERNSHIP IN MICROBIOLOGY I, II (4,8) 8

Clinical internship including lectures and supervised training in areas of bacteriology, parasitology, mycology and virology. Emphasis is on methods of isolation and identification of specific disease-causing organisms. Post, Allard.

36-402 INTERNSHIP IN CLINICAL CHEMISTRY I, II (4,8) 8

Clinical internship including lectures and supervised training in qualitative and quanitative analysis of body fluids useful in diagnosis of physiologic abnormalities. Emphasis is on methods, quality control and clinical interpretation. Post, Allard.

36-403 INTERNSHIP IN HEMATOLOGY I, II (4,8) 8

Clinical internship including lectures and supervised training in principles of hemopoiesis and methods and techniques useful in diagnosis of specific blood dyscrasias. Post, Allard.

36-404 INTERNSHIP IN IMMUNOHEMATOLOGY I, II (4,8) 8

Clinical internship including lectures and supervised training in principles of blood banking, serology, coagulation and immunology. Emphasis is on genetic and immunologic qualities of blood, the blood group systems, compatibility testing and antibody detection. Post, Allard.

36-410 CLINICAL MICROBIOLOGY PRACTICUM I (0,6) 2

Supervised clinical training in a consortial hospital clinical laboratory. Designed to reinforce knowledge and skills gained in lecture and laboratory and at the same time introduce the student to the daily activities of the clinical microbiology laboratory. Emphasis will be placed on quality control, methodology and clinical interpretation. Prerequisites: 36-311, 313. Post.

36-411 ADVANCED MEDICAL MICROBIOLOGY II (3,0) 3

Intensive study of classification, morphology, physiology, genetics and ecology of medically important fungi, parasites and viruses. Emphasis on epidemiology, pathogenicity and host defense. Prerequisites: 36-311, 313. Corequisite: 36-413. Lam, Post.

36-413 ADVANCED MEDICAL MICROBIOLOGY LABORATORY II (0,4) 2

Intensive study on isolation, cultivation and identification of medically important fungi, parasites and viruses. Emphasis on principles, procedures and interpretation of clinical specimens processing. Independent project is an integral part of course. Corequisite: 36-411. Lam, Post.

36-420 CLINICAL HEMATOLOGY PRACTICUM II (0,6) 2

Supervised clinical training in a corsortial hospital clinical laboratory. Designed to reinforce knowledge and skills gained in lecture and laboratory and at the same time introduce the student to the daily activities of a clinical hematology laboratory. Emphasis will be placed on quality control, methodology and clinical interpretation. Prerequisites: 36-321, 36-323. Allard.

36-430 CLINICAL IMMUNOHEMATOLOGY PRACTICUM II (0,6) 2

Supervised clinical training in a corsortial hospital clinical laboratory. Designed to reinforce knowledge and skills gained in lecture and laboratory and at the same time introduce the student to the daily activities of the clinical immunohematology laboratory. Emphasis will be placed on quality control, methodology and clinical interpretation. Prerequisites: 36-331, 332, 333, 334. Post.

36-450 CLINICAL BIOCHEMISTRY PRACTICUM II (0,6) 2

Supervised clinical training in a corsortial hospital clinical laboratory. Designed to reinforce knowledge and skills gained in lecture and laboratory and at the same time introduce the student to the daily activities of the clinical biochemistry laboratory. Emphasis will be placed on quality control, methodology and clinical interpretation. Prerequisites: 36-452, 454. Allard.

36-461 AUTOMATION I (1,4) 3

A course intended to acquaint the student with current theories and methods of automated instrumental analysis as it is currently applied to the clinical laboratory. Coursework will include the assembly, maintainence, calibration and quality control of such instrumentation as well as a term project designed to adapt instrumental analysis to automated methodologies. Lectures and laboratory. Prerequisite: 36-454.

Health (Course Prefix 30)

30-101 INTRODUCTION TO HEALTH PROFESSIONS I, II (2,0) 2

This course serves as a foundation for the students interested in health careers and provides a base for students to reappraise their career options within the health professions. Concepts of health, the factors that influence health, and the needs for health care are examined. Students are oriented to the health care system and the health manpower necessary to provide health services. Data is provided from the perspective of practicing health professionals as well as direct observation through field trips for utilization by students to reappraise and/or reaffirm their career options within the health field.

30-201 COMMUNITY HEALTH I, II (3,0) 3

Emphasizes the concepts, philosophy and principles of public health and the relationship to the physical, mental and social well-being of the community, its individuals, families and groups. The focus is on the prevention of disease, the promotion and maintainance of health and the provision of environmental and personal health services through organized community effort.

30-413 HUMAN EXPERIENCE AND LOSS I (3,0) 3

An investigation of the concept of loss as a dimension of the human experience. Contributions to understanding the problem of loss from the perspective of various disciplines will be incorporated into lecture and seminar discussion. Consideration will be given to the grieving process as a natural response to loss and as a mechanism for renewal and personal growth. Example: loss situations such as relocation, separation, divorce and death will be explored and techniques for the social management of such loss will be discussed. Rawnsley.

Health Education (Course Prefix 31)

31-301 CONTEMPORARY HEALTH PROBLEMS I (3,0) 3

Study and analysis of current health problems in terms of their physio - psycho - social influence on the individual, the family, and the community. Emphasis is on those major health problems which are affecting the quality of life now and in the future for children, youth, and adults below age 40. Members of the Department.

31-302 CONTEMPORARY HEALTH PROBLEMS II (3,0) 3

Study and analysis of current health problems in terms of their physio - psycho - social influence on the individual, the family, and the community. Emphasis is on those major health problems which are affecting the quality of life now and in the future for persons over age 40. Prerequisite: 31-301. Co or Prerequisite: 31-306. Members of the Department.

31-304 HEALTH EDUCATION SEMINAR I, II (3,0) 3

Progress and changing approaches in health care delivery, trends in professional health careers, health economics and consumer health, and the latest medical and health science discoveries will be treated in depth through current readings, discussions, and student reports. Corequisite: 31-301 or 302. Members of the Department.

31-306 INTRODUCTION TO GERONTOLOGY II (3,0) 3

This course will examine human aging from a multi-disciplinary and developmental perspective. The course will focus on the adult years of the life span. The social-psychological factors involved in adjustments to the aging process, to retirement, to family, to leisure, to aloneness, to death and bereavement will be discussed together with such special concerns of the elderly as widowhood, finances, religion, sexuality, and health problems. Rehabilitative strategies such as remotivation and reality orientation are included. Open to all. Required for health education majors. O'Rourke; Futrell.

31-402 CURRICULUM AND TEACHING OF HEALTH IN THE ELEMENTARY SCHOOL II (3,0) 3

Methods and materials for health teaching and curriculum development at the elementary level. Emphasis is placed upon the changing health needs and interests of children at the primary, intermediate, and upper grade levels. Prerequisites: health education major and 45-301 or 302 or 305; 45-322; 45-326 or 327 or 328; 31-301; 84-252; 31-304, 306, 302, 403, 407, 405. Corequisite: 31-404, 406, 408. Members of the Department.

31-403 CURRICULUM AND TEACHING OF HEALTH IN THE COMMUNITY I (3,0) 3

Methods and materials for health teaching and program development in the community. Emphasis is on strategies and techniques effective with the various publics within a community. Similarities and differences of health problems germane to various groups are considered as bases for curriculum in public health education. Prerequisites: health education major and 31-301, 304, 306, 302. Corequisites: 31-407, 405; 84-252. Members of the Department.

31-404 CURRICULUM AND TEACHING OF HEALTH IN THE SECONDARY SCHOOL II (3,0) 3

Methods and materials for health teaching and curriculum development at the secondary level. Readings and discussion are focussed on the variable health concerns and problems of adolescents as bases for curriculum content and teaching-learning approaches. Prequisites: health education major and 45-301 or 302 or 305; 45-322; 45-326 or 327 or 328; 31-301, 304, 306, 302, 403, 407, 405. Corequisites: 31-402, 408, 406. Staton and Members of the Department.

31-405 COMMUNITY HEALTH EDUCATION PRACTICUM I (0,8) 4

Various community agencies offering health education programs will be utilized for apprentice teaching of health concepts under supervision of community teaching personnel and/or College health education faculty. Students will be encouraged to independently initiate community teaching workshops or learning modules in areas of their interest. Prerequisite: health education major. Corequisite: 31-403. Staton and Members of the Department.

31-406 APPRENTICE TEACHING OF HEALTH IN THE ELEMENTARY SCHOOL II (0,8) 4

Full-time apprentice teaching of health in public elementary schools under the supervision of qualified classroom teachers, school health coordinators, principals, and health education faculty. Provides experience for students in applying and extending his knowledge and abilities in teaching, as well as opportunity to participate in the total school program. Prerequisite: health education major. Corequisite: 31-402. Staton and Members of the Department.

31-407 SEMINAR IN HEALTH EDUCATION I (3,0) 3

Discussion and review of the more effective methods, materials, and resources for developing favorable knowledge, attitudes, and behavior in healthful living. Opportunity is provided for improving skills in critical analysis of literature, material aids, and research in health education. Prerequisite: health education major. Corequisites: 31-403, 405. Staton and Members of the Department.

31-408 APPRENTICE TEACHING OF HEALTH SECONDARY SCHOOL II (0,8) 4

Full-time apprentice teaching of health in public secondary schools under the supervision of qualified health educators, school health coordinators, principals, and health education faculty. Provides experience for students in applying and extending his knowledge and abilities in teaching, as well as opportunity to participate in the total school program. Prerequisite: health education major. Corequisite: 31-404. Staton and Members of the Department.

Health Services Administration (Course Prefix 32)

32-301 CONTEMPORARY HEALTH PROBLEMS I (3,0) 3

Study and analysis of current health problems in terms of their physio - psycho - social influence on the individual, the family and the community. Emphasis is on those major health problems which are affecting the quality of life now and in the future for children, youth and adults below age 40. Members of the Department.

32-302 CONTEMPORARY HEALTH PROBLEMS II (3,0) 3

Study and analysis of current health problems in terms of their physio - psycho - social influence on the individual, the family and the community. Emphasis is on those major health problems which are affecting the quality of life now and in the future for persons over age 40. Prerequisite: health services administration major and 32-301. Co or Prerequisite: 32-306. Members of the Department.

32-306 INTRODUCTION TO GERONTOLOGY II (3,0) 3

This course will examine human aging from a multi-disciplinary and developmental perspective. The course will focus on the adult years of the life span. The social-psychological factors involved in adjustments to the aging process, to retirement, to family, to leisure, to aloneness, to death and bereavement will be discussed together with such special concerns of the elderly as widowhood, finances, religion, sexuality, and health problems. Rehabilitative strategies such as remotivation and reality orientation are included. Open to all. Required for health services administration majors. O'Rourke; Futrell.

32-310 SEMINAR IN HEALTH SERVICES ADMINISTRATION I, II (3,0) 3

Constantly changing methods and legislature in health care delivery will be treated in depth through directed readings, discussions and student reports. New Federal and State health legislation such as the Health Maintenance Organization Act, 1973, funding for establishment of HMOs, legal ramifications of changes in Medicare, Medicaid, 3rd party payment, and new Nursing Home standards will be systematically analyzed as to the issues involved. Corequisite: 32-301 or 302. Tillock.

32-408 LEGAL ASPECTS OF HEALTH FACILITIES. I (3,0) 3

This course provides the students with a comprehensive study of the laws and the subsequent regulations that affect health care and the delivery of health care. Prerequisites: 32-306, 301, 302, 310. Corequisites: 32-409; 66-200. Members of the Department.

32-409 FIELD SERVICE IN HEALTH SERVICES ADMINISTRATION I I (0,12) 6

Learning experiences for the application of basic theory in health services administration wil be provided in selected health agencies. Health administration faculty and specified agency personnel will supervise and guide the students in the attainment of identified objectives. Prerequisites: 60-201, 202, 64-201, 202, 211, 212; 32-301, 310, 302, 306. Corequisites: 32-408; 66-200. Tillock; Members of the Department.

32-410 FIELD SERVICE IN HEALTH SERVICES ADMINISTRATION II — II (0,20) 10

Learning experiences for the application of advanced theory in health services administration will be provided in selected health agencies. Health administration faculty and specified agency personnel will supervise and guide the students in the attainment of identified objectives. Prerequisites: 32-408, 409; 66-200. Corequisite: 32-412. Tillock; Members of the Department.

32-412 SEMINAR IN HEALTH SERVICES ADMINISTRATION — II (2,0) 2

This seminar will provide students with the opportunity to identify commonalities from their field experiences, to analyze their individual experiences and synthesize this knowledge as it relates to the role of the heath service administrator. Corequisite: 32-410. Tillock; Members of the Department.

Nursing (Course Prefix 33)

33-202 BASIC PRINCIPLES FOR NURSING PRACTICE — II (1,4) 3 [1978]

This course introduces the student to the basic principles of nursing. Lecture and laboratory methods will be utilized to develop basic perceptual motor and communication skills. Nursing principles will be applied in simulated or clinical experiences. Members of the Department.

33-301 NURSING SCIENCE I: LECTURE — I (4,0) 4

The students are introduced to the profession of nursing, its practice, its role, its legal responsibilities and its relationships with other health diciplines. The nursing process is taught as a model for delivery of professional nursing care, with the emphasis on the phase of assessment. An overview of wellness throughout the life cycle is presented. Prerequisites: 33-202 and completion of mandatory core program. Members of the Department.

33-302 NURSING SCIENCE I: BASIC CLINICAL MODULE — II (O,5) 2.5 [1977]; II (0,6) 3 [1978]

Each student spends two days a week for one half a semester in a medical-surgical setting in order to develop nursing skills. The student assesses the patient's position on the health-illness continuum. Under faculty guidance, the student interviews selected patients and develops a plan to meet the identified health needs. Implementation and evaluation of this nursing care plan is carried out according to the student's level of development. Members of the Department.

33-303 NURSING SCIENCE I: MATERNAL CHILD HEALTH CLINICAL MODULE — I (0,5) 2.5 [1977]; I (0,6) 3 [1978]

For the purpose of assessing health care needs and planning nursing care, each student spends two days a week for one half a semester with well children and families in a variety of settings. Members of the Department.

33-304 NURSING SCIENCE I: PSYCHOSOCIAL ASSESSMENT — I (1,0) 1

The course includes identification and exploration of the behavioral concepts that underlie the practice of professional nursing. Emphasis is on developing the student's skill in interviewing techniques and psychosocial assessment methods. Application of the concept of the theraputic use of the self is facilitated through analysis of student-client interactions. Members of the Department.

33-305 NURSING SCIENCE I: HISTORY PHYSICAL ASSESSMENT LECTURE — I (1,0) 1

A systems-oriented introduction to history-taking and physical assessments. Concepts will be presented in a weekly one-hour didactic session jointly taught by a physician and nurse practitioner. Members of the Department.

33-306 NURSING SCIENCE I: HISTORY PHYSICAL ASSESSMENT LABORATORY — I (0,2) 1

Supervised laboratory practice sessions offer students opportunity to apply theory presented in 33-305 and to develop related technical skills. Members of the Department.

33-307 NURSING SCIENCE I: SEMINAR — I (1,0) 1

Seminar provides the student with the opportunity to apply leadership skills, to share knowledge through participation, and to investigate in-depth an area of special interest. Members of the Department.

*33-308 NURSING SCIENCE I: A. V. SIMULATION LABORATORY — I (0,2) 1

Basic nursing perceptual skills are learned in a multi-media laboratory at the student's own pace, under faculty guidance. After students have passed the performance test in the audio-visual laboratory, skills are included in their clinical laboratory assignment. Members of the Department.

* Discontinued September 1978.

33-309 NURSING SCIENCE II LECTURE — II (4,0) 4

Common health problems of children and young adults are studied. Complications of the maternity cycle are presented. Building on the previous nursing courses, students learn how needs may change with illness. Prerequisites: All Nursing Science I courses. Members of the Department.

33-310 NURSING SCIENCE II: MEDICAL/SURGICAL/PSYCHIATRIC NURSING CLINICAL MODULE — II (0,6) 3

Students are guided through learnings which are designed to increase clinical, inter-personal competencies, and professional growth. Experiences with hospitalized patients are selected for application of theoretical concepts. Psychosocial aspects of patient care are integrated in the plan of care for hospitalized patients and their families. The planning phase of the nursing process is emphasized. Members of the Department.

33-311 NURSING SCIENCE II: MATERNAL CHILD HEALTH/COMMUNITY CLINICAL MODULE — II (0,6) 3

Students work with clients in obstetric and pediatric units, utilizing relevant theory in applying the planning phase of the nursing process. Visits to families in the child-bearing and child-rearing phase provide opportunities to observe the dynamics of family behavior and to make appropriate referrals. Members of the Department.

33-312 NURSING SCIENCE II: PSYCHOSOCIAL ASSESSMENT II (1,0) 1

Students continue to expand upon interpersonal techniques and psychosocial assessment skills. Emphasis is on developing the student's ability to form hypotheses about behavior and to develop a plan for nursing intervention which incorporates relevant theoretical concepts and research findings, as well as appropriate treatment modalities. Members of the Department.

33-313 NURSING SCIENCE II: HISTORY/PHYSICAL ASSESSMENT LECTURE II (1,0) 1

A systems-oriented course in history-taking and physical assessment, focusing on assessment of the young in accordance with curricular emphasis. Concepts will be presented in a weekly one hour session via didactic lectures, films, and other audio-visual resources. Jointly taught by a nurse practitioner and physician. Members of the Department.

33-314 NURSING SCIENCE II: HISTORY/PHYSICAL ASSESSMENT LABORATORY II (0,2) 1

Supervised laboratory sessions for developing physical examination skills with application of theoretical concepts from lectures and readings. Members of the Department.

33-315 NURSING SCIENCE II: SEMINAR II (1,0) 1

Seminar provides the students with the opportunity to increase their skills in leadership, to share knowledge through participation, and to investigate in-depth an area of special interest. Open to Junior nursing majors only. Members of the Department.

33-401 NURSING SCIENCE III: LECTURE I (5,0) 5

Continued study of the unidirectional growth pattern with emphasis on common medical and surgical problems affecting adults between the ages of forty and senescence. Normal physiological and psychosocial changes in the maturing process are studied along with changes of a pathological nature. Concepts of crisis prevention and intervention, fluid and electrolyte balance, legal aspects, safety and security needs, teaching, rehabilitation, consultation and collaboration are applied in planning nursing intervention for patients in primary, acute and long-term settings. Prerequisites: Completion of Junior level nursing courses. Members of the Department.

33-402 NURSING SCIENCE III SEMINAR I (1,0) 1

Faculty selects seminar topics pertinent to Nursing Science III. The student assumes responsibility for assessing the learning needs of peers in relation to the topic to be presented and for promoting learning through group analysis and discussion. Members of the Department.

33-403 NURSING SCIENCE III: CLINICAL LABORATORY I (0,6) 3

Application of concepts and skills learned in previous nursing courses and nursing theory. The total nursing process is developed as students provide care to adults with common medical/surgical conditions in a variety of acute care settings. Mastery of physical assessment and other advanced nursing skills are developed. The clinical experience integrates multiple concepts such as aging, health promotion, rehabilitation, nutrition, pharmacodynamics and the teaching and research role of the nurse. The student participates in the selection of his own learning experiences based on his individual learning needs. Members of the Department.

33-404 NURSING SCIENCE III: COMMUNITY LABORATORY I (0,6) 3

Application of community and mental health principles is emphasized in this component of the course. The focus is on recognition of common health problems in community settings. Clinical placements stress long-term care in both the hospital and home. Members of the Department.

33-405 NURSING SCIENCE III: CLINICAL HISTORY/ PHYSICAL EXAM RECITATION I (1,0) 1

This course offers increased depth of understanding in physical assessment. Topics will coordinate with the weekly content presented in 33-401. Periodic praticums will be arranged on an assigned basis in the community or in the physical assessment laboratory utilizing clients in the older adult age category in accordance with curricular emphasis. Corequisite: 33-401. Members of the Department.

33-406 NURSING SCIENCE IV: LECTURE II (4,0) 4

Emphasizes evaluation as a continuous part of decision making in the nursing process. Examines critically the trends, methods, problems and legal implications of nursing care. Integrates (with an elementary research project) theories relating to initiation and promotion of change. Utilizing prior knowledge of the health needs of patients from 40 to senescence, the student prepares for advanced nursing practice, including team leadership. By synthesizing health assessment knowledge and skills in history-taking and physical examination and by communicating effectively with multidisciplinary team members, the student co-ordinates planned intervention for patient health maintenance and rehabilitation and prepares to be a self-directing professional nurse. Prerequisites: All Nursing Science I courses. Members of the Department.

33-407 NURSING SCIENCE IV: SEMINAR II (1,0) 1

Seminar method is used to focus on student selected topics relating to nursing practice. Leadership skills including interpersonal relationships, group process, and evaluation will be emphasized. Concepts relating to professional issues are analyzed to stress future trends in nursing. Members of the Department.

33-408 NURSING SCIENCE IV: A.V. SIMULATION LABORATORY II (0,1) .5

Faculty selected films, filmstrips, slides and tapes reinforce student learning in the audio-visual laboratory. This independent learning fosters understanding of health problems encountered in hospital and community settings. Members of the Department.

33-409 NURSING SCIENCE IV: CLINICAL HOSPITAL LABORATORY II I (0,6) 3

Clinical learning experiences provide the student with opportunities to synthesize, integrate and apply knowledge of human development and needs while caring for critically ill individuals and/or groups of individuals. The student begins to function as a team leader. All aspects of the professional nursing role are stressed including interdisciplinary cooperation, patient advocacy, teaching and accountability through self initiated evaluation of performance. The student will utilize current research and investigate problems requiring change within the clinical situation. Members of the Department.

33-410 NURSING SCIENCE IV: COMMUNITY LABORATORY II (0,6) 3

The student functions with greater independence in assessing a health need of an individual, family or group in a variety of community settings. Beginning research skills are applied to identify pertinent community and mental health aspects of the problem. A plan is formulated, based on investigative findings, and recommendations are made for appropriate nursing intervention. Members of the Department.

33-411 NURSING SCIENCE IV: CLINICAL HISTORY/ PHYSICAL EXAM AND PRACTICUM II (0,1) .5

This course concludes the four semester course on history-taking and physical assessment. Building on the skills and theory of physical assessment and all other nursing courses, this class will cover selected topics dealing with integration of expanded skills into current nursing practice. Learner identified areas of interest will be presented by small groups to the class with the assistance of the instructor and outside consultants. Practicums will be conducted with patients from a variety of age ranges in community and acute-care agencies. Members of the Department.

DEPARTMENT OF PHYSICAL EDUCATION

Physical Education and Coaching (Course Prefix 38)

The following courses may be taken as "unrestricted elective courses" by students who have a general interest in the theory and practice of physical education as well as by students who wish to pursue the minor in physical education and coaching. These courses do not satisfy the Physical Activities Requirement of the University Core Requirements.

38-100 CARE AND PREVENTION OF ATHLETIC INJURIES I, II (3,0) 3

The anatomy of all major types of athletic injuries, with emphasis on the nature and extent of injuries and the various modes of prevention and treatment.

38-105 FITNESS AND NUTRITION I (3,0) 3

Designed to show the relationship of nutrition to physical activity. An overview of basic activity, exercise, and fitness is provided.

38-210 PSYCHOLOGY OF COACHING I, II (3,0) 3

Provides students with a basic understanding of the psychological aspects of human behavior in relationship to competitive sports.

38-212 SPORTS IN AMERICA I, II (3,0) 3

A course designed to acquaint the student with the inherent values of sports as a social phenomenon.

38-213 SCIENTIFIC FOUNDATIONS OF PHYSICAL EDUCATION I, II (3,0) 3

Acquaints the student with the reasons for providing instruction in physical education and physical activity. The course seeks to develop a scientific basis for physical education.

38-270 INTRODUCTION TO COACHING I, II (3,0) 3

An introductory course in basic philosophies of coaching, stressing the development of team selection, schedules, practices and interpersonal relationships.

38-320 LEGAL ASPECTS IN PHYSICAL EDUCATION AND COACHING II (2,0) 2

Developing concepts of physical welfare and safety concerning participants in the classroom, on the practice field, and in contests.

38-321 ADMINISTRATION OF ATHLETIC PROGRAMS II (3,0) 3

The organization and administration of individual team and school athletic programs with emphasis upon developing skills in public relations and budgeting.

38-322 PRACTICUM IN ATHLETICS I, II (3,0) 3

Supervised teaching experience in a sports activity. The student will teach under the guidance of a qualified faculty member.

38-323 THEORY AND TECHNIQUES OF COACHING SELECTED SPORTS I, II (2,0) 2

An in-depth discussion and analysis of selected sports. Prerequisite: 38-270.

38-324 SPORTS OFFICIATING I (2,0) 2

Seeks to develop officiating competencies, particularly in rules-interpretation and crowd-control.

38-420 KINESIOLOGY II (3,0) 3

A course designed to provide knowledge of body structure and movement for the purpose of analyzing human performance.

38-450 PHYSIOLOGICAL ASPECTS OF COACHING II (3,0) 3

Acquaints the student with the scientific basis of functional systems and considers their relevancy for analyses of sports performance.

Physical Activities (Course Prefix 39)

The following courses, with a course prefix of 39, will satisfy the University's physical activities requirement for graduation.

39-100 BEGINNING ARCHERY I A,B; II A,B (0,2) .5

To introduce the beginning student to the skills in this highly individualized sport through proper technique and safety procedures. Shooting is done at both 20 and 30 yards in target archery.

39-102 BOWLING I A,B; II A,B (0,2) .5

Introduction to ten-pin bowling, the love of the sport, choice of equipment, basic bowling techniques, etiquette, scoring, and types of tournaments with competitive bowling. Extra $1.65 fee for three strings, shoes, and transportation to and from the lanes.

39-104 BEGINNING BILLIARDS I B; II A,B (0,2) .5

To introduce the beginning student to the basic grip, stance, stroke, how "to break" and to execute various angled and banked shots. Nominal extra fee to rent the tables.

39-105 INTERMEDIATE ARCHERY I B; II A,B (0,2) .5

Time is spent to refine the seven basic stages of shooting with introduction to the use of ground markers, pin sights, and the fine points of shooting. (Prerequisite: 39-100 or permission of instructor.)

39-109 FITNESS FOR WOMEN I A,B; II A,B (0,2) .5

To gain an overview of and to experience the various modes of conditioning principles in action through aerobics, XBX, circuit training, music, weight training, and the like. Discussions of anatomy and physiology plus that of nutrition and relaxation techniques to develop a critical approach to fitness as it applies to women.

39-110 FITNESS I A; II B (0,2) .5

To improve personal fitness levels through running, progressive flexibility exercises, calesthenics, and weight training.

39-112 BEGINNING GOLF I A; II B (0,2) .5

To introduce the beginning student to the basic grip, stance, swing, and etiquette of golf. Use of short, mid-, and long irons with a brief use of the woods.

39-113 INTERMEDIATE GOLF II B (0,2) .5

To improve the student's basic golf swing and choice of clubs in stroke strategy. Part of the time will be spent at a driving range and/or at a Par-3. (Prerequisite: 39-112 or permission of instructor.) Extra fee.

39-114 INTERMEDIATE TENNIS I A; II B (0,2) .5

Emphasis will be placed on baseline stroking, net play, serves, and effective strategy in singles and doubles. (Prequisite: 39-116 or permission of the instructor.)

39-115 INDIVIDUAL SPORTS I A,B; II A,B (0,2) .5

To cover rules, strategy, strokes, and etiquette of both handball and squash. In addition, discussion also includes the history of the activities with a comparison of the English and American games.

39-116 BEGINNING TENNIS I A; II B (0,2) .5

To acquaint the novice player to forehand, backhand, serve, rules, etiquette, and elementary strategy of tennis. It is hoped that the students will be able to volley successfully at the end of this six week course.

39-118 TRACK I A; II B (0,2) .5

Students will practice the proper fundamentals in throwing and running events. Fundamentals in hurdling and the use of starting blocks will be stressed. Students will participate in a class track meet as a culminating event.

39-119 CROSS-COUNTRY I A; II B (0,2) .5

Students will be schooled in the basic fundamentals of long distance running, stressing both physical and psychological conditioning.

39-120 WEIGHT TRAINING I A,B; II A,B (0,2) .5

The program is designed for individual instruction in all phases of weight training and is designed to acquaint the student with the benefits of weight training as a method of conditioning.

39-123 STANDARD FIRST AID I A,B; II A (0,2) .5

Upon successful completion of this course, students will be certified by the American Red Cross. This course is a prerequisite to Advanced Lifesaving and to WSI.

39-125 MEN'S GYMNASTICS I B; II A (0,2) .5

Skills and techniques in parallel bars, pommel horse, rings, and horizontal bar. Beginning instruction in tumbling, trampoline, and dual stunts.

39-126 BADMINTON I B; II A,B (0,2) .5

To introduce and to refine the basic strokes, footwork, and game strategy of both singles and doubles. In addition, time will be spent on the proper etiquette and the laws of badminton, a fast-paced game.

39-127 WOMEN'S GYMNASTICS I A; II A,B (0,2) .5

For students who have had some previous experience in gymnastics and who are interested in improving their skills and form on the balance beam, unevens, horse, and trampoline.

39-128 HANG GLIDING I I A; II A (0,2) .5

Ground school includes the history and design of hang gliders, how to fly, safety considerations, basic weather conditions, use of simulator and wind tunnel. Ground school test at end of course.

39-129 HANG GLIDING II I B; II B (0,2) .5

To continue in hang gliding, students must have completed successfully the ground school and its test. Field and mountain trips for flying experience. (Prerequisite: 39-128.)

39-130 MEN'S BASKETBALL I B; II A (0,2) .5

An introduction to the fundamentals of passing, shooting, rebounding, defensive moves, plus the basic strategy of the fast-break, zone defense, and man-to-man defense.

39-132 WOMEN'S BASKETBALL I B; II A (0,2) .5

For students with previous experience in the sport. Time will be devoted to improving individual skills and on advanced team strategy and game science.

39-133 ETHNIC DANCE I B; II B (0,2) .5

An introduction to the basic steps and formations of various folk and square dances with a brief history of each dance and its cultural meaning.

39-134 BALLROOM DANCE I B; II A (0,2) .5

An introduction to social dancing, including the fox trot, waltz, cha-cha, tango, as well as the current "disco" dances. Extra fee.

39-137 FLOOR HOCKEY I B; II A (0,2) .5

Basic techniques of passing, shooting are described and practiced. The various offensive and defensive formations employed in the game of hockey are emphasized.

39-140 SOCCER I A; II B (0,2) .5

Skills and techniques as applied to soccer, the popular world-wide game, are taught. Game science and strategy are also emphasized.

39-142 LACROSSE FUNDAMENTALS I A (0,2) .5

For both the experienced and inexperienced player. Instruction, drills, and individual work in the basic skills of the game: passing, catching, cradling, dodging, and the like. A desirable activity for students wishing to try-out for the varsity spring team.

39-143 TEAM HANDBALL I A; II B (0,2) .5

A competitive approach to this popular European team game with emphasis on individual skills and team strategy.

39-145 MEN'S SOFTBALL II B (0,2) .5

Basic instruction in the skills involved in playing slow-pitch softball.

39-146 WOMEN'S SOFTBALL II B (0,2) .5

For students with a previous background. Time will be spent on improving throwing, catching, fielding, and hitting skills along with strategy and team play.

39-150 TOUCH FOOTBALL I A (0,2) .5

Recreational approach to football (non-contact) with class competition. Techniques covered include passing, kicking, blocking, catching, with rules and strategy.

39-151 FLAG FOOTBALL I A (0,2) .5

To gain knowledge of the rules and strategy of the game and to utilize the basic skills in a game situation.

39-153 FISTBALL/VOLLEYBALL I B; II A (0,2) .5

In addition to playing volleyball, students will be introduced to the quick, team game of fistball, a game closely related to volleyball.

39-154 ELEMENTARY GAMES I B; II A,B (0,2) .5

To teach students how to teach games of low organization through increasing their leadership skills, group awareness, safety considerations, and how to deal with children. This course is especially good for future playground leaders, camps counselors, and Elementary Education majors.

39-155 VOLLEYBALL I A,B; II A,B (0,2) .5

To learn the techniques and skills used in power volleyball, its rules, etiquette, and team play. Emphasis will be placed on drills and competitive class play.

39-156 INDOOR TEAM GAMES I B; II A (0,2) .5

Competitive-recreational program designed to encourage team and individual play within a team concept. Activities change every two weeks within the eight-week course.

39-157 ADVANCED VOLLEYBALL II A (0,2) .5

To develop further the skills of power volleyball by introducing the advanced skills of back sets, float serves, and the diving-roll. (Prerequisite: 39-155 or permission of the instructor.)

39-158 FIELD HOCKEY I A (0,2) .5

For students who have had previous experience in this fast-moving game. Time will be spent on improving individual skills, on covering and marking, and on developing excellent offensive and defensive play and patterns. (Prerequisite: previous experience or permission of the instructor.)

39-160 BEGINNING SWIMMING I A,B (0,2) .5

To equip the student with basic water safety skills and knowledge in order to make him/her reasonably safe while in, on, or about the water. To prepare the student for additional water safety skills designed to improve his/her stamina and basic coordination. Red Cross.

39-161 INTERMEDIATE SWIMMING I A,B; II A (0,2) .5

To give the student practice in learning and mastering the basic leg and arm movements essential to good swiming in the front crawl, elementary backstroke, side stroke and breast stroke. Red Cross.

39-162 SWIMMER'S LEVEL SWIMMING II A (0,2) .5

To increase the student's endurance and versatility in the water by providing opportunities to coordinate the parts of a stroke into the whole stroke as well as mastering turns on front, back, and side to employ a wider range of strokes in a closed course. (Prerequisite: 39-161 or its equivalent.) Red Cross.

39-163 ADVANCED LIFESAVING II B (0,4) 1

To provide the student with the knowledge and skills designed to save his own life or the life of another in the event of an emergency. The training is not intended to be a complete lifeguard training course. (Prerequisites: 39-123 and 39-162.) Red Cross.

39-169 WATER SAFETY INSTRUCTOR'S (WSI) II (0,4) 2

To give the instructor-candidate the knowledge, judgment, teaching skills necessary to train others in swimming skills. To instill a high degree of personal efficiency in swimming and lifesaving skills in order to teach safety in, on, or about the water. Red Cross. (Prerequisites: 39-123 and 39-163 or their equivalent.)

39-170 JUDO I A,B; II A,B (0,2) .5

Designed to develop the individual's character, physical abilities, coordination, and balance. Students completing written and practical examinations will be eligible to progress in the various ranks of Judo.

39-172 KARATE I A,B; II A,B (0,2) .5

Knowledge, skill and understanding of the historical development and nature of the sport are taught. Students practice the various techniques for correct performance of the activity. Advancement in the karate ranking system is provided for those passing the required examinations. Extra fee.

39-175 WRESTLING I B; II A (0,2) .5

The fundamental rules and skills of free-style wrestling are presented. Take-downs, mat wrestling, and pinning combinations are stressed in addition to the necessity of proper physical conditioning.

39-180 FIFTY MILE SWIM I A,B; II A,B (0,2) .5

To encourage the student to swim regularly and frequently until 50 or more miles are reached in order to improve the fitness level of the swimmer and to correct faulty stroke mechanics. Red Cross.

39-181 SYNCHRONIZED SWIMMING II A (0,2) .5

To learn the various water stunts, floating formations and patterns and to modify the basic swimming strokes to be performed to music. Students will be encouraged to choreograph their own routines and will have the chance to work singly, in pairs, in groups. (Prerequisite: 39-161 or its equivalent.)

39-190 BEGINNING CROSS-COUNTRY SKIING II A (0,2) .5

Instruction in cross-country skiing, safety factors, and proper waxing techniques. A local golf course will be used for practice. Equipment rental fee.

39-191 BEGINNING ROCK CLIMBING I A; II B (0,2) .5

Classroom session covering terminology, knot tying, rappeling, proper response to commands, and safety precede two five-hour climbing sessions on successive Sunday mornings. Meal fee.

39-192 BEGINNING BACKPACKING I A; II B (0,2) .5

Classroom sessions on equipment, safety, and destination, followed by a weekend in New Hampshire's White Mountains. Meal fee.

39-193 ADVANCED BACKPACKING I B; II A (0,2) .5

Classroom review of equipment, safety, and destination, followed by a weekend in New Hampshire's White Mountains under winter conditions. Meal fee. (Prerequisite: 39-192 or permission of instructor.)

39-222 FENCING II B (0,2) .5

To introduce the student to the French foil techniques of attack, retreat, touch points, scoring strategy, safety, and the love and lore of the activity. Duels will take place at the end of the course.

39-224 DYNAMIC PHYSICAL FITNESS I I (0,2) 1

This semester course covers weight training and running as modes of conditioning. The second half of the course meets the second semester.

39-225 DYNAMIC PHYSICAL FITNESS II II (0,2) 1

A continuation of the first semester's work and conditioning level, this semester uses swimming as a mode of conditioning, and the final quarter of the course employs all three techniques. (Prerequisite: 39-224 or permission of the instructor.)

39-227 INDEPENDENT ACTIVITY I A,B; II A,B (0,2) .5

For students with severe scheduling problems that can present evidence of being able to formulate and to execute an individual program of their own in consultation with the instructor. (Permission of the instructor.)

39-230 SCUBA DIVING II A,B (0,4) 1

To provide the student with a basic knowledge of physics, physiology, and medical aspects as they relate to a diver's performance in the water. Emphasis is placed on the diver's physical fitness, diving hazards, personal limitations, and the behavioral changes needed to function safely as a diver. (Prerequisite: 39-161 or permission of the instructor.

39-231 SKIN DIVING II B (0,2) .5

To prepare the student to select and to use with care the mask, snorkle, fins, plus lifesaving and first aid techniques as they apply to skin diving with emphasis on dive-planned safety rules and emergency procedures. (Prerequisite 39-161 or permission of the instructor.)

39-250 COACHING TECHNIQUES I, II (1,1) 1

Course is designed to provide the fundamental knowledge necessary in assuming the leadership role of a coach. Subject areas include training and conditioning techniques, drug use in athletics, public relations, legal aspects, travel policies, awards, motivation, budget preparation, and educational values in athletics.

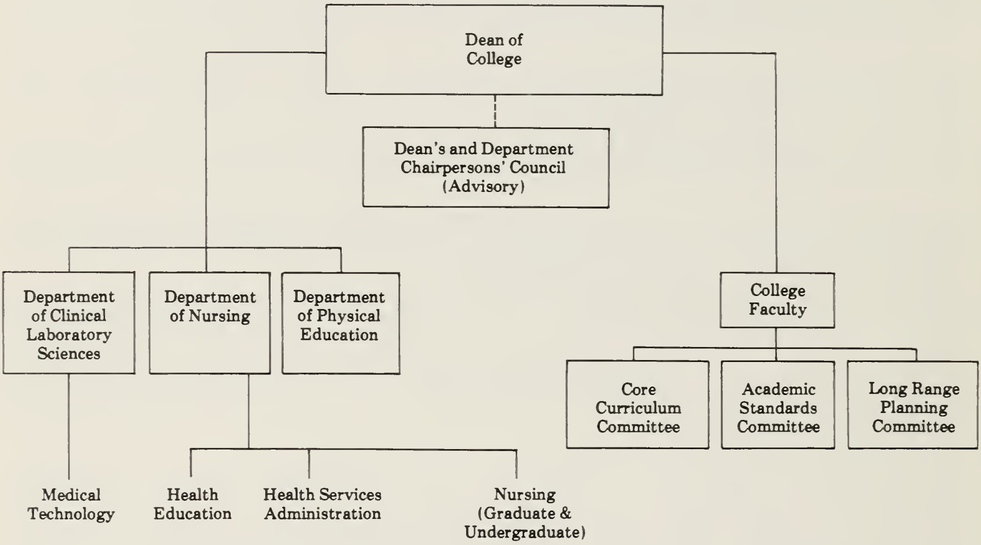
39-251 BASKETBALL OFFICIATING I (1,1) 1

Course is designed to give the student an appreciation of the official's role in athletic contests. Rules, techniques, and basic principles of officiating will be stressed. Provision will be made to take the written and floor tests for certification for those students wishing to pursue this goal.

ORGANIZATION AND GOVERNANCE

The College of Health Professions is organized into three departments and is administered by a dean, who is assisted by an advisory committee, the Dean's and Department Chairpersons' Council. The three departments are responsible for developing course offerings and programs of studies. Although the faculty of the College has overall responsibility for all academic policies of the College, the Academic Standards Committee is responsible for enforcing the academic standards of the College and also serves as a review body for suspended students seeking readmission with probationary status.

ORGANIZATIONAL CHART


Dean of College
Dean's and Department Chairpersons' Council (Advisory)
Department of Clinical Laboratory Sciences
Department of Nursing
Department of Physical Education
College Faculty
Core Curriculum Committee
Academic Standards Committee
Long Range Planning Committee
Medical Technology
Health Education
Health Services Administration
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Ms. Eleanor Shalhoup, Chairperson, Nursing

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Each major in the College of Health Professions has a community Advisory Council whose membership includes outstanding professionals in the field.

FACULTY OF THE COLLEGE OF HEALTH PROFESSIONS

DEAN OF THE COLLEGE

Gertrude F. Barker, R.N.; B.S.; M.S.; Ed.D.

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Joseph P. Farina, B.S.; M.S.; M.S. Ed.; Ph.D.; Clinical Laboratory Sciences.

Eleanor Shalhoup, B.S.; M.S.; C.A.G.S.; Nursing.

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Irving Jay Newman, Pediatrics; M.D., University of Miami.

William O'Rourke, Nursing; B.A., St. Bonaventure University; M.A., Holy Name College; M.Ed., University of New Hampshire; Ph.D. Boston College.

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Eugene Tillock, Health Services Administration; B.S., Long Island University; M.S., M.A., Ed.D., Columbia University.

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Stuart G. Weisfeldt, Obstetrics and Gynecology; Ph.D., M.D., Marquette University.

Sheryd J. Woltman, Nursing; B.S., M.S., Boston University.

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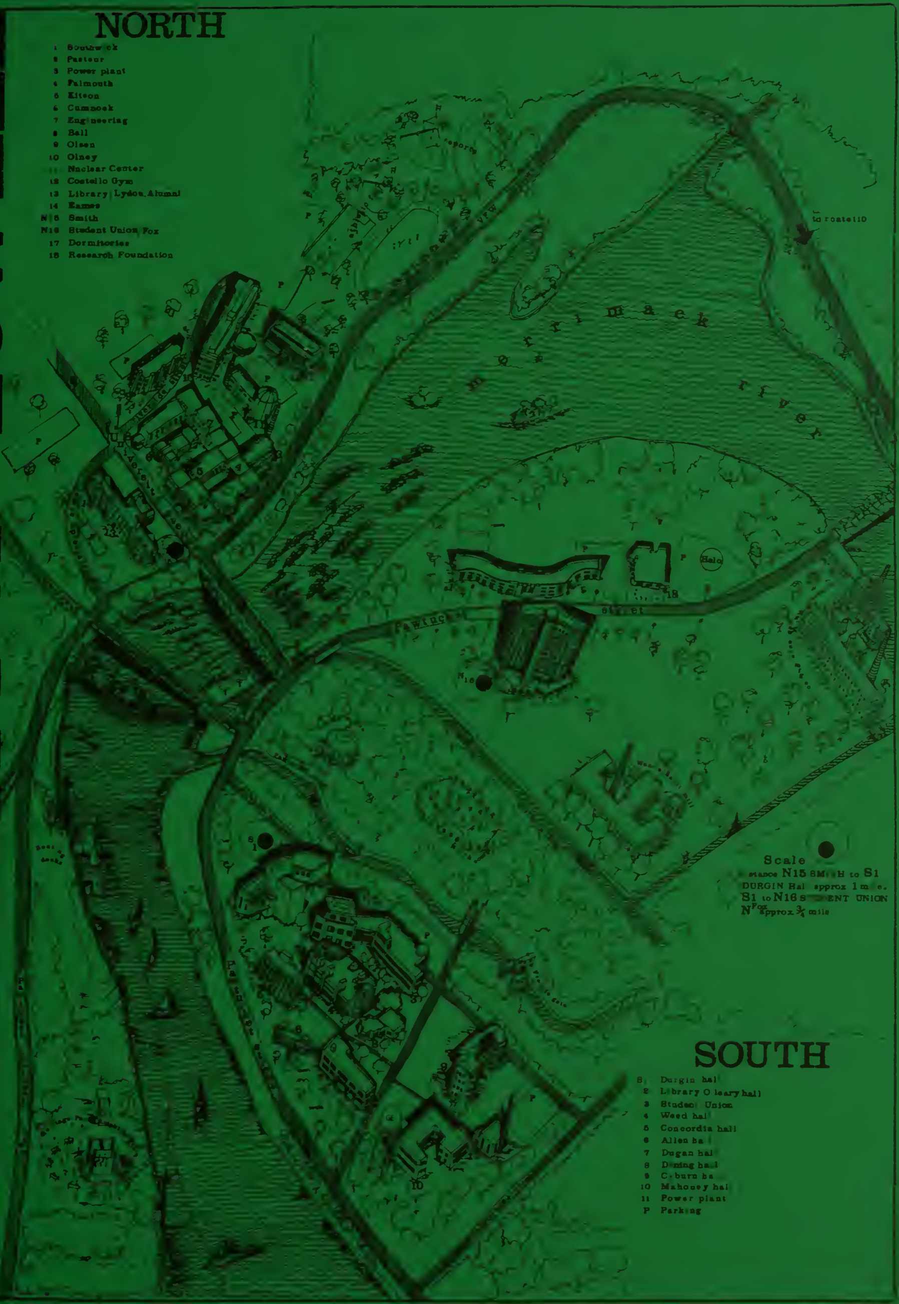

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